

SPECIALIZED ASSAULT UNITS OF THE WORLD WAR I WESTERN FRONT: A  
COMPARATIVE STUDY OF THE GERMAN STORMTROOPER BATTALIONS,  
AND CANADIAN TRENCH RAIDERS

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Military History

by

CHRISTOPHER J. GHIZ, MAJOR, U.S. ARMY  
B.A., The Citadel Military College, Charleston, South Carolina, 1995

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Trench Raiders

Approved by:

\_\_\_\_\_, Thesis Committee Chair  
D. Scott Stephenson, Ph.D.

\_\_\_\_\_, Member  
Mark T. Gerges, Ph.D.

\_\_\_\_\_, Member  
Scott A. Porter, M.Ed.

Accepted this 11th day of June 2010 by:

\_\_\_\_\_, Director, Graduate Degree Programs  
Robert F. Baumann, Ph.D.

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## ABSTRACT

SPECIALIZED ASSAULT UNITS OF THE WORLD WAR I WESTERN FRONT: A COMPARATIVE STUDY OF THE GERMAN STORMTROOPER BATTALIONS, AND THE CANADIAN TRENCH RAIDERS, by MAJ Christopher Ghiz, 83 pages.

This thesis will use a comparative study of the German Storm trooper battalions and the Canadian trench raiders in order to examine the dynamics of the World War I battlefield, the role of military culture in adaptation in order to acknowledge and act on the requirements of battlefield innovation. The purpose is to determine what key factors contributed to the tactical effectiveness of specialized assault units on the Western Front. The military cultures of these armies comprised the logical and innovative principles that were fundamental in the tactical effectiveness of these elite assault units by making revolutionary developments in force structure, institutional support, personnel selection, decentralized leadership, and training on small-unit tactics and advanced weaponry. Did these tactics create similar or different effects for each army? What factors did these armies use to organize and employ these assault units? To answer these questions, several areas will be examined: (1) force structure, (2) institutional support, (3) personnel selection, and (4) training on decentralized leadership, small unit infiltration tactics, and advanced weaponry. Both armies had different backgrounds and situations. The German Army's *Sturm* battalions represented an army-wide institutionalization of organization, selection and technique. The Canadian Corps' trench raiders were based on the Canadian Corps' homogeneous structure that separated itself from the BEF in developing its own doctrine, training schools, organization, and tactical innovations.

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## CHAPTER 1

### INTRODUCTION

Charles Carrington, a World War I combat veteran, accurately summed up the beginning of trench warfare:

Back in the heroic age of 1914, during the race to the sea, French and German infantry had confronted one another here and had dug themselves in where they happened to beat the end of the skirmish. The first front line followed the string of rifle pits . . . which men had scabbed for themselves with their entrenching tools, under fire. Step by step, as labour and expert assistance from the corps of engineers was available, this line of pits was joined into a continuous trench and covered by an apron fence of barbed wire.<sup>1</sup>

This was the beginning of static trench warfare beginning in 1914. Throughout the remainder of the war, armies innovated ways to break the stalemate of trench warfare to gain ground and reduce casualties on the Western Front.

This thesis concerns the specialized assault units of the German and Canadian armies in a comparative study to examine the dynamics of the World War I battlefield, the requirements of battlefield innovation, and the role of military culture in adaptation. The primary research question is how did military culture contribute to the key factors essential to the tactical effectiveness of the specialized assault units on the Western Front? The military cultures of these armies structured the logical and innovative principles that were fundamental in the tactical effectiveness of these elite assault units by making attainable revolutionary developments in force structure, institutional support,

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<sup>1</sup>Charles Carrington, *Soldier from the Wars Returning* (London: Hutchinson, 1965), 89-90, in Hubert C. Johnson, *Breakthrough!: Tactics, Technology, and the Search for Victory on the Western Front in World War I* (Novato, CA: Presidio Press, 1994), 57.



personnel selection, decentralized leadership, and training on small-unit tactics and advanced weaponry seen in the German storm troops and Canadian trench raiders.

Did these factors create similar or different effects for each army? These factors create similar or different effects for each army? The factors created a larger, more unique effect on the German army. These factors that led to the development of storm troop tactics, had a profound effect on the German army later during the interwar period. The German general staff used combined arms warfare concepts from the second half of World War I to innovate blitzkrieg tactics during World War II. Another example is that these factors set the frame for creating entire storm troop divisions in preparation for the Spring Offensive of 1918. As the effects for the German army lasted well into World War II, this was not the case for the Canadian army.

The Canadian Corps, disbanded after World War I, did not influence any developments during the interwar period. However, because of its trench raiding successes, these military cultural factors had an immense, but brief effect on the Canadian Corps. Trench raiding was an invaluable intelligence tool for the Canadian Corps from late 1915-1918. For example, the trench raids conducted from 20 March to 9 April 1917, gained vital intelligence on the German positions leading up to the Battle of Vimy Ridge on 9-14 April 1917.<sup>2</sup> This recent intelligence gave the Canadian Corps the flexibility to alter its attack plans and seize more of the initiative from the four German (Bavarian) divisions entrenched on Vimy Ridge by 14 April, and drove them off with

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<sup>2</sup>G.W.L. Nicholson, *The Official History of the Canadian Army in the First World War: Canadian Expeditionary Force, 1914-1919* (Ottawa: Queen's Printer, 1962), 234.

surprisingly fewer casualties than previous attempts.<sup>3</sup> The Canadian victory at the Battle of Vimy Ridge in 1917 represents one of the most indicate victories of any BEF unit in France and Belgium since the beginning of the war.<sup>4</sup>

The significance of this thesis is that the German army's storm battalions and the Canadian army's trench raiders had adopted specialized assault tactics for unique situations. Although these armies used numerous factors to organize and employ their assault units with tactical effectiveness, the focus of this thesis will be on five factors. This thesis will analyze each factor considering development and application in doctrine and execution. These factors are: (1) force structure, (2) institutional support, (3) personnel selection, and (4) training on decentralized leadership, (5) small unit tactics, and advanced weaponry.

One definition of military culture is the sum of the values, attitudes, and perspectives of the professional officer corps.<sup>5</sup> In addition, how the officer corps assesses the operational environment and analyzes the best method to engage threats to national security.<sup>6</sup> The underlying hypothesis of this work is that the military cultures of these armies were central to the tactical effectiveness of these assault units. The innovations adopted by these assault units are external manifestations of their military cultures.

Another assumption was that the German and Canadian armies of the Western Front

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<sup>3</sup>Ibid., 234, 246 and 247.

<sup>4</sup>Ibid., 266.

<sup>5</sup>Samuel Huntington, *The Soldier and the State: The Theory and Politics of Civil-Military Relations* (Cambridge, MA: Harvard University Press, 1957), 62-67.

<sup>6</sup>Ibid.

transformed their cultures when experimenting with new tactics when they saw their old tactics fail at a high cost in the first two years of World War I. These armies were not trying to create permanent military elites within their organizations. They created these assault units as an ad hoc tactical solution for their armies as a whole. These armies originated from different cultural backgrounds, which developed different ways of war.

The Prusso-German way of war initially developed from the early Prussian rulers who acknowledged the need for limited, not prolonged warfare because the Prussian kingdom faced traditional enemies on all of its borders.<sup>7</sup> Frederick the Great found solutions to Prussia's strategic problem and won limited wars during the eighteenth century. After his death, the Prussian army suffered a period of defeats, during the Napoleonic period.

The Prusso-German culture's most formative period was the century before World War I, beginning with the Prussian army reforms and rising German nationalism during and after Napoleon's downfall. Prussian army reformers, with Gerhard von Scharnhorst in the lead, established a professional and educated officer corps by selecting officers based on talent, not on aristocratic status and creating the general staff, where they placed most talented officers. The Prussian army reforms also emphasized initiative as French history lecturer accurately described after the Franco-Prussian War of 1870:

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<sup>7</sup>Robert M. Citino, *The German Way of War: From the Thirty Years' War to the Third Reich* (Lawrence, KS: University Press of Kansas, 2005), xiv; Gordon A Craig, *The Politics of the Prussian Army 1640-1945* (London: Oxford University Press, 1955), 13; Walter Göerlitz, *History of the German General Staff, 1657-1945*, trans. Brian Battershaw (New York: Frederick A. Praeger, Publishers, 1953), 6-7; R.R. Palmer, "Frederick the Great, Guibert, Bülow: From Dynastic to National War," in *Makers of Modern Strategy: from Machiavelli to the Nuclear Age*, ed. Peter Paret (Princeton, NJ: Princeton University Press, 1986), 102-104.

Common among (German) officers was the firm resolve to retain the initiative by all means . . . NCOs and soldiers were exhorted, even obligated to think independently, to examine matters and to form their own opinion. These NCOs were the backbone of the Prussian army . . . their special role, supported by a respect for them unknown in other armies, secured them an honorable and envied position. The Prussian army was proud of them.<sup>8</sup>

However, by World War I, the traditional Prussian-German military culture experienced a transformation because of a series of innovations stemming from the onset of modern combined-arms warfare. The Prusso-German way of war influenced other European armies in every echelon of their institutions by World War I.<sup>9</sup>

The Prussian army, by the end of the nineteenth century, became the European model for military organization and strategic, operational, and tactical doctrine. This was a result of their victories over the Austrian and French armies from 1866 to 1870. Samuel J. Lewis writes that this period was reminiscent of Napoleonic warfare or war of annihilation, by using every means necessary to achieve victory.<sup>10</sup>

Unlike Germany, Canada did not have a military oriented culture. Canada's national defense was never a major concern to its society because its terrain isolation

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<sup>8</sup>L. Rousset, *Historie Generale de la Guerre Franco-Allemande* (Paris: 1886), in Franz Uhle-Wettler, "Auftragstaktik: Mission Orders and the German Experience," in *Maneuver Warfare: An Anthology*, ed. Richard D. Hooker (Novato, CA: Presidio Press, 1993), 241.

<sup>9</sup>Dennis E. Showalter, "The Prusso-German RMA, 1840-1871," in *The Dynamics of Military Revolution 1300-2050*, eds. MacGregor Knox and Williamson Murray (Cambridge, UK: Cambridge University Press, 2001), 112-13; Hew Strachan, *The First World War* (New York: Penguin Books, 2003), 41-42.

<sup>10</sup>Samuel J. Lewis, "Königgrätz" (Fort Leavenworth, KS: Department of Military History, US Army Command and General Staff College, 1988), repr., US Army Command and General Staff College, *H100 Book of Readings* (Fort Leavenworth, KS: USACGSC, June 2009), 374.

which gave it a false sense of security.<sup>11</sup> However, throughout Canada's history, its soldiers had proven to be talented in identifying their battlefield requirements early and learning by experience.<sup>12</sup> Canada possesses an adaptive culture in innovation that created an approach to its own way of war, dating back to the earliest French colonies in the early seventeenth century, in present-day Canada.

In 1669, French King Louis XIV in ordered the creation of the militia to backfill the shortage of French troops to protect its colonists.<sup>13</sup> During its colonial times, the hostile Indian tribes and the English colonies to the south threatened New France. Eventually, the Canadian militia adopted tactics from the Indians to deal with the internal security threats of the country.<sup>14</sup> The militia accomplished this by recognizing its situational requirements early and used gained knowledge through experience in fighting the Indians.<sup>15</sup> This is one example of the culture in adaptation displayed by the Canadians. Advanced weaponry was next adaptation that influenced both the Canadian and German ways of war in the latter half of the nineteenth century.

Helmuth von Moltke, the Prussian army's Chief of Staff from 1857 to 1888, noticed the lethality of advanced weaponry. Furthermore, he "had foreseen the danger of

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<sup>11</sup>George F.G. Stanley, *Canada's Soldiers 1604-1954: The Military History of an Unmilitary People* (Toronto: The Macmillian Company of Canada Limited, 1954), 1; Bernd Horn, ed., *Fortune Favours the Brave: Tales of Courage and Tenacity in Canadian Military History* (Toronto: Dundurn Press, 2009), 12.

<sup>12</sup>Stanley, *Canada's Soldiers*, 1; Horn, *Fortune Favours the Brave*, 12.

<sup>13</sup>Stanley, *Canada's Soldiers*, 21.

<sup>14</sup>*Ibid.*, 24.

<sup>15</sup>*Ibid.*, 17.

conducting frontal attacks. German doctrine subsequently emphasized outflanking enemy positions. Not even regulations, however, could negate the cult of the offensive, known as *Angriffshetze* (attack mania).<sup>16</sup> Moltke further saw examples of the lethality of advanced weaponry in the U.S. Civil War and the Franco-Prussian War of 1870.

The U.S. Civil War and the Franco-Prussian War of 1870 was evidence of how devastating modern weapons are on masses of troops. The advanced weapons used in these wars represented nineteenth century Industrial Revolution technology, which superseded European army tactics. Later, the Boer and Russo-Japanese Wars showed European military observers the destructiveness of field artillery, machine guns, clip-fed rifles, strong entrenchments, and fortifications. To the European military observers, their witnessing of the effects of advanced weaponry still did not convince them to find solutions to their obsolete tactics.<sup>17</sup> In addition, the Russo-Japanese and Boer wars illustrated the tactical employment of heavy weapons systems.<sup>18</sup> However, the mainstream mentality of European military professionals dismissed the Boer and Russo-Japanese Wars as minor conflicts “fought at the end of long supply lines and having no useful lessons for a future war in Europe.”<sup>19</sup> This attitude reflected European tactical doctrine up to World War I.

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<sup>16</sup>Lewis, “Königgrätz,” 374.

<sup>17</sup>Hubert C. Johnson, *Breakthrough!: Tactics, Technology, and the Search for Victory on the Western Front in World War I* (Novato, CA: Presidio Press, 1994), 6.

<sup>18</sup>Jonathan M. House, *Toward Combined Arms Warfare: A Survey of 20th Century Tactics, Doctrine, and Organization* (Fort Leavenworth, KS: US Army Command and General Staff College, August 1984), 17.

<sup>19</sup>*Ibid.*

Another lesson of the Russo-Japanese war on the pre-World War I tactical doctrine of European armies was the reliance on masses of troops and frontal assaults, believing that the attacker's numerical superiority would ensure victory. The European armies supported this doctrine by the means of mass conscriptions and employing men of trained reserves. However, professional officers and NCOs of European armies only trained draftees and reservists well enough to employ them in overly centralized large formations.<sup>20</sup> The leaders of that time did not believe in decentralizing their leadership down to the lower ranks because it interfered with their doctrine of envelopment using mass formations to flank the enemy's force.<sup>21</sup>

Pre-war operational doctrine for European armies was conducting offensive operations, and envelop the enemy's flanks. In the early World War I years, however, there was too much troop density on opposing sides to maneuver on enemy flanks.<sup>22</sup> This attempted flanking and enveloping by the opposing armies led to what was known as the 'race to the sea,' beginning in the east at the Franco-German border, extending west to the North Sea.

The Race to the Sea meant Western Front was no longer a war of maneuver. Instead, the Western Front stabilized and opposing armies built static defenses and trench lines beginning at the North Sea coast and reaching southeast to the French-Swiss border. On the tactical level, the stage was set for the trench warfare stalemate on the Western

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<sup>20</sup>Ibid., 15.

<sup>21</sup>Ibid.

<sup>22</sup>Ibid.

Front and the opposing armies thus began the creation of specialized assault units to break that stalemate.

### Limitations

Many references address the history of German military culture dating back to Frederick the Great in the Eighteenth century. These references are essential to understanding the mindset of Prusso-German military officers and how their culture emphasized innovation and change. However, primary references specifically addressing how German military culture contributed to the German army's reforms in 1916 are limited to the personal writings of General Erich von Ludendorff and other German high command officers in 1916. Several references do address the German army storm battalions in World War I. In addition, these references emphasize how instrumental the storm battalions were in implementing new tactical doctrines in 1916 to break the stalemate of trench warfare. Some secondary sources written from 1916 until the late 1930's about the German army in World War I were never translated into English. This has limited the research scope.

Research on the Canadian Corps in World War I resulted in many published secondary sources specifically addressing the battles it fought in and specific tactics it used. However, finding published sources specifically dealing with Canadian military culture was a challenge. Some Canadian historians admit that Canadians do not possess a militaristic culture.<sup>23</sup> There are not many sources written on Canadian military culture compared to the Germans. The delimitations were the primary sources that backfilled the

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<sup>23</sup>Stanley, *Canada's Soldiers*, 1; Horn, *Fortune Favours the Brave*, 12.



shortfalls with published books are English translations of personal accounts, memorandums, bulletins, declassified intelligence reports, after action reviews of battles, and training manuals.

## CHAPTER 2

### GERMAN STORM BATTALIONS

The only satisfaction I took from the whole event was from the way the storm troops comported themselves. They were a new breed of fighter so far as I was concerned, the volunteers of 1918: still raw, but instinctively brave. Those young dashers with long hair and puttees would start quarrelling among themselves twenty yards in front of the enemy because one had called the other a scaredy-cat, and yet they all swore like troopers and threw their weight around no end. 'Christ, we're not all such funks as you are!' yelled one, and rolled up another fifty yards of trench single-handed.<sup>24</sup>

— Ernst Jünger, a German Army Storm Troopcompany Commander

The German “military-machine culture” was stemmed, in part from the deteriorating German economic situation because of the British naval blockade.<sup>25</sup> As a result, Germany had limited resources to support its war industry and lost the “battle of material” (*die Materialschlacht*) against the Allies.<sup>26</sup> According to Holger. H. Herwig, the German high command analyzed an alternative solution.<sup>27</sup> With fewer war material stocks, the German army had to shoot better on all weapons to conserve ammunition and

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<sup>24</sup>Ernst Jünger, *Storm of Steel*, trans. Michael Hoffmann (London: Penguin Books, 2003), 266-267.

<sup>25</sup>Michael Geyer, “German Strategy in the Age of Machine Warfare, 1914-1945,” in *Makers of Modern Strategy: from Machiavelli to the Nuclear Age*, ed. Peter Paret (Princeton, NJ: Princeton University Press, 1986), 541.

<sup>26</sup>Martin Samuels, *Doctrine and Dogma: German and British Infantry Tactics in the First World War* (Westport, Conn.: Greenwood Press, 1992), 13; Göerlitz, *History of the German General Staff*, 189-190.

<sup>27</sup>Holger H. Herwig, “The Dynamics of Necessity: German Military Policy During the First World War,” in *Military Effectiveness, vol.1, The First World War*, eds. Allan R. Millet and Williamson Murray (Boston: Allen & Unwin, 1988), paraphrased in Martin Samuels, *Doctrine and Dogma*, 13.

move faster to reduce their space and timing in taking objectives to conserve other supplies and reinforcements.<sup>28</sup> This qualitative approach was the German army's solution by the summer of 1916, after two years of destructive war. General Erich von Ludendorff, the German army's quartermaster general, examined any potential improvements for the German army through innovations, which gave testimony to German military culture that emphasized change.<sup>29</sup> The German army's transformation started with a series of tasks ranging from: anticipating the requirements across the army's front line units to make them more tactically effective; to gathering feedback from subordinate leaders; to altering and modifying the force structure's equipment and personnel.<sup>30</sup>

By 1916, one anticipated requirement was the German army adopted better operational design by balancing the goals of the levels of war or "integral operation" (*Gesamtschlacht*)," to better coordinate battles.<sup>31</sup> The next requirement, according to Michael Geyer, was that the aftermath of the Battle of the Somme forced the German

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<sup>28</sup>Ibid.

<sup>29</sup>Williamson Murray, "Innovation: Past and Future," in *Military Innovation in the Interwar Period*, eds. Williamson Murray and Allan R. Millett (Cambridge, UK: Cambridge University Press, 1996), 313 and 315; Rod Paschall, *The Defeat of Imperial Germany: 1917-1918* (Chapel Hill: Algonquin Books, 1989), 23.

<sup>30</sup>Timothy T. Lupfer, *The Dynamics of Doctrine: The Changes in German Tactical Doctrine During the First World War, Leavenworth Papers 4* (Fort Leavenworth, Kansas, 1981), viii; Paschall, *The Defeat of Imperial Germany*, 24.

<sup>31</sup>Geyer, "German Strategy in the Age of Machine Warfare, 1914-1945," 536-537; Holger H. Herwig, "The German Victories, 1917-1918," in *The Oxford Illustrated History of the First World War*, ed. Hew Strachan (Oxford, UK: Oxford University Press, 1998), 253.

army to adopt a “military-machine culture” as an operational method by innovating a new tactical doctrine while obtaining the proper “resources” to apply the doctrine.<sup>32</sup> At the same time, instill more flexibility in units to combine their tactics employment with a bigger variety of infantry weapons and artillery.<sup>33</sup> This new culture changed the way the German army was going to perform in combat by letting go of older traditions and delegating authority to the lowest unit level and entrusting junior leaders to use their initiative in battle.<sup>34</sup>

The German army’s cultural framework described earlier represented an institutionalization of organization, selection, and technique, which created an environment to formulate a new tactical doctrine that made it possible to employ the storm battalions. The institution of organization and new doctrine changed the German army’s force structure, starting with placing a storm battalion per infantry division and filling the battalion’s ranks with pioneers and *Jägers*. Strict personnel selection allowed the storm battalions to expand its numbers with physically and mentally qualified soldiers. Finally, the German officer and NCO corps’ decentralized leadership technique provided the framework for training the storm battalions on small-unit tactics, combined with advanced weaponry innovations.

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<sup>32</sup>Michael Geyer, “German Strategy in the Age of Machine Warfare, 1914-1945,” 541.

<sup>33</sup>Ibid.

<sup>34</sup>Ibid., 543.

### Force Structure

The history of the German storm battalions (*Sturmabteilung*) began on 2 March 1915 when the OHL ordered the German army's VIII Corps to consolidate pioneer troops to build a storm detachment (*Sturmabteilung*).<sup>35</sup> A headquarters element, a headquarters, two pioneer companies, and a 37-mm. gun detachment comprised the first storm battalion.<sup>36</sup> Captain G.C. Wynne, a British army World War I veteran, argues that in 1915, first storm battalion was the work of two talented German army officers, Captains Rohr and Reddemann, to formulate the plans.<sup>37</sup> Regardless of when exactly the storm battalions originated, its creation was an attempt to develop a new tactical offensive doctrine in order to support the new elastic defense-in-depth doctrine.

The German army had to change its doctrine in the way it fought battles and campaigns, defensively and offensively, by the re-structuring of its tactical-level units, which led to the creation of the storm battalions. The first step in the force re-structuring of the German army was when the German high command (OHL) developed a new defensive doctrine by 1 December 1916, titled *The Principles of Command in the*

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<sup>35</sup>Bruce I Gudmundsson, *Stormtroop Tactics: Innovation in the German Army, 1914-1918* (New York: Praeger Publishing, 1989), 46; Samuels, *Doctrine and Dogma*, 14.

<sup>36</sup>Gudmundsson, *Stormtroop Tactics*, 46; Martin Samuels, *Doctrine and Dogma*, 14.

<sup>37</sup>G.C. Wynne, *If Germany Attacks: The Battle in Depth in the West*, eds. Colonel Thomas E. Griess and Professor Jay Luvaas (1940; repr., Westport, CT: Greenwood Press, Publishers, 1976), 147.

*Defensive Battle in Position Warfare* directed by General Ludendorff.<sup>38</sup> This doctrine required the re-structuring of infantry divisions to be more flexible and mobile. The divisions, reduced to three regiments each, provided easier command and control.<sup>39</sup> According to the defense-in-depth doctrine, every infantry regiment designated one battalion as a counterattack element attached to the divisional reserve.<sup>40</sup> In the winter of 1916-1917, the storm battalions were designated the divisional reserve as counterattack follow-on-forces.<sup>41</sup>

A storm battalion comprised of one to five “assault companies” (*Sturmkompanien*) and two “machine-gun companies” (*Maschinengewehrkompanien*).<sup>42</sup> In addition, one flamethrower platoon (*Flammenwerfertrupp*) and one artillery battery (*Infanterie-Geschütz-Batterie*) and one “trench mortar company” (*Minenwerferkompanie*) were assigned to the storm battalion.<sup>43</sup> Unlike the normal infantry battalion, the 1,400-man storm battalion was a

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<sup>38</sup>Lupfer, *The Dynamics of Doctrine*, 11-12; Richard Holmes, *The Western Front* (New York: TV Books, L.L.C., 1999), 154.

<sup>39</sup>Lupfer, *The Dynamics of Doctrine*, 16; Holmes, *The Western Front*, 155.

<sup>40</sup>Lupfer, *The Dynamics of Doctrine*, 16; Holmes, *The Western Front*, 155.

<sup>41</sup>Holmes, *The Western Front*, 155; House, *Toward Combined Arms Warfare*, 26-27.

<sup>42</sup>Martin Samuels, *Doctrine and Dogma*, 28.

<sup>43</sup>*Ibid.*

combined arms force.<sup>44</sup> The storm battalions' unique organization became a source of study for the Allies facing them on the Western Front.

The German storm battalions' organization and structure definitely caught the Allies' attention. In support of this claim, the Canadian Corps created a sub-section in their intelligence reports dedicated to the German storm battalions as illustrated by this Canadian Corps intelligence summary dated 16 June 1917:

A document captured during our recent operations gives the following information.

STURM BATTALION (Attacking Battalion).

In May 1916 the idea of such a unit was first discussed and STURM BATTALION ROHR was formed. In December 1916 each army formed a storm battalion –

Composition:

2 Infantry storm companies

1 Machine Gun Company

1 Trench Mortar Company

1 Forward battery – Infanterie Geschütze Batterie – equals literally Infantry Gun Battery

1 Flame projector platoon

Storm battalion is directly under the Army and is employed for specially difficult operations. Infantry are led in attack by them. Storm battalions take positions but infantry must hold them.

STOSS TRUPP. (Counter Attacking Unit) Regimental or Divisional Unit.

This unit is retained at battle H.Q.

O.C., STOSS TRUPP will be duly warned with regard to the part of the line to which he will be detailed. He will study the position thoroughly and will carry out operations on practice trenches in rear of the front, constructed exactly like the trenches in the line. Then if the enemy breaks through he will either conduct an immediate counter attack or a deliberate counter attack with Artillery preparation according to circumstances and as ordered by the higher command. After the operation is completed, the assaulting troop is withdrawn again.<sup>45</sup>

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<sup>44</sup>Seventh Department, German General Staff, "Die Entwicklung der deutschen Infanterie im Weltkriege (1914 bis 1918)," in *Militärwissenschaftliche Rundschau* 3 (1938), 381, paraphrased in Samuels, *Doctrine and Dogma*, 28.

<sup>45</sup>Canadian Corps General Staff, "Summary of Intelligence, Part II: Sturmtrupp, Attacking Unit and Stoss Trupp, Counter Attacking Unit," 16 June 1917, 197-198, War



Figure 1. A Pioneer from SB Rohr in typical Stormtrooper uniform  
*Source:* trenchfighter.com, Website, Photo, <http://www.trenchfighter.com/40029/69301.html> (accessed February 2010).

### Institutional Support

One of the unique aspects of the German military culture was that the institutional support of the German storm battalions started from the highest echelon, the German high command, and filtered its way down throughout the German army. A case in point about German army institutional support is the fact that in May 1916, General Erich von Falkenhayn influenced subordinate commanders to build up their own storm battalions on

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Diaries (WD), National Archives of Canada (NAC), Research Group 9 (RG9), Militia and Defence (MD), Series III-D-3, Volume 4815, Reel T-7177, File: 1, <http://data2.collectionscanada.ca/e/e041/e001001753/e001001754.jpg> (accessed 28 March 2010).



their own initiative.<sup>46</sup> German army echelons recognized the need for developing new defensive and offensive tactical doctrines and provided their unilateral support because, unlike the Allies, were more open to accepting new ideas. However, to exploit the expansion of the storm troop battalions as quickly as possible, the German high command transitioned the existing *Jäger* battalions and augmented them with pioneer troops to create the first storm battalions. Both institutions already possessed the requirements that formulated the backbone of the German storm troop battalions.

Historically, the German *Jägers* were known for their skills in the wilderness.<sup>47</sup> The Prussian army recruited and organized the *Jägers* into their own battalion-size special units, tasked to seize and control key terrain features on the battlefield.<sup>48</sup> The *Jäger* battalions specialized in light infantry skills and were used small unit tactics in the trenches.<sup>49</sup> The *Jägers* were also experts in land navigation and moving with stealth that larger units could not negotiate.<sup>50</sup> The *Jäger* battalions' tactical reliability made them most capable to adopt storm troop tactics due their traditions of talented sharpshooting, field craft, and decentralized leadership style.<sup>51</sup> The *Jägers*', with their battlefield

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<sup>46</sup>Gudmundsson, *Stormtroop Tactics*, 80.

<sup>47</sup>*Ibid.*, 78.

<sup>48</sup>*Ibid.*

<sup>49</sup>Bruce I. Gudmundsson, "Maneuver Warfare: The German Tradition," in *Maneuver Warfare: An Anthology*, ed. Richard D. Hooker (Novato, CA: Presidio Press, 1993), 284; Martin Middlebrook, *The Kaiser's Battle* (London: Penguin Books, 2000), 47-48.

<sup>50</sup>Gudmundsson, "Maneuver Warfare: The German Tradition," 284.

<sup>51</sup>*Ibid.*

competencies advantageous for the Western Front trenches, merged with the German pioneers, with their skills and weapons, formed the first storm battalions (*Strumbataillone*).<sup>52</sup>

After the creation of the experimental storm troop battalion, Assault Battalion Rohr, the German high command directed the creation of the first follow-on storm troop battalion.<sup>53</sup> The 3rd *Jäger*-Assault Battalion (*Jäger-Sturm-Batallion*) was formed in August 1916, upon completion of training from the Assault Battalion Rohr.<sup>54</sup> By October 1916, General Ludendorff was very impressed with the performance of the Assault Battalion Rohr and directed storm battalion formations for every German field army.<sup>55</sup> The most prepared troops for an assault battalion, in terms of trench warfare weapons, were pioneers.

The German army's pioneer troops were also the forerunners of the storm troop battalions. The pioneers were adapt to operating in small units under low-level command at the beginning of World War I.<sup>56</sup> Their functionality, resourcefulness, barrier-breaching competencies, gave them an advantage in discovering the most capable way of advancing into enemy trenches.<sup>57</sup> The German pioneers were the experts at hand grenade throwing,

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<sup>52</sup>Ibid.

<sup>53</sup>Gudmundsson, *Stormtroop Tactics*, 79; Samuels, *Doctrine and Dogma*, 23-24.

<sup>54</sup>Gudmundsson, *Stormtroop Tactics*, 79; Samuels, *Doctrine and Dogma*, 24.

<sup>55</sup>Gudmundsson, *Stormtroop Tactics*, 84; Samuels, *Doctrine and Dogma*, 25.

<sup>56</sup>Gudmundsson, *Stormtroop Tactics*, 177.

<sup>57</sup>Ibid.

breaching and erecting obstacles, breaking through enemy defenses<sup>58</sup> In 1914, the proportion of pioneer companies to infantry companies was one for every thirty-two.<sup>59</sup> This proportion, along with their expertise in hand grenades, placed the pioneer troops in great demand by infantry commanders.<sup>60</sup> These two echelons of the German army, the pioneers and *Jägers*, provided the most institutional support for the creation of the storm battalions. With the *Jägers* and pioneer troops making up the first storm battalions, the German army sought the need to expand storm troop units to all the infantry divisions.



Figure 2. Men of the 4th Company Stormbattalion Rohr with a group of infantrymen they were training in assault methods

Source: trenchfighter.com, Website, Photo, <http://www.trenchfighter.com/40029/69301.html> (accessed February 2010).

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<sup>58</sup>Gudmundsson, *Stormtroop Tactics*, 35; Samuels, *Doctrine and Dogma*, 14.

<sup>59</sup>Gudmundsson, *Stormtroop Tactics*, 35.

<sup>60</sup>*Ibid.*

### Personnel Selection

German military culture valued their junior leaders possessing technical and tactical competence.<sup>61</sup> For example, the first successful storm troop battalion commander was Captain Willy Martin Rohr, the commander of the first experimental storm battalion, who was recognized by having the technical and tactical competence well ahead of his peers.<sup>62</sup>

Another German officer, Lieutenant Colonel George Bruchmüller, received recognition for his superior revolutionary knowledge in artillery tactics.<sup>63</sup> He proved himself as General von Hutier's chief of artillery in September 1917 on the Eastern Front when the German Eighth Army captured the town of Riga from the Russian 12th Army.<sup>64</sup> Shortly after the battle, Lieutenant Colonel George Bruchmüller, promoted to colonel, went to the Western Front, reassigned as the storm troop divisions' artillery bombardment for the upcoming German Spring Offensive in March 1918.<sup>65</sup> In the fields of infantry and artillery, these officers exemplified the standard of excellence in the German army, which demonstrated how the personnel selection of talented officers enhanced the tactical effectiveness of the German storm troops. Captain Rohr and

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<sup>61</sup>Ibid., 174-175.

<sup>62</sup>Ibid., 47-48.

<sup>63</sup>Gudmundsson, *Stormtroop Tactics*, 113; Martin Middlebrook, *The Kaiser's Battle* (London: Penguin Books, 2000), 51; Holmes, *The Western Front*, 189.

<sup>64</sup>Gudmundsson, *Stormtroop Tactics*, 114-121; Hubert C. Johnson, *Breakthrough!: Tactics, Technology, and the Search for Victory on the Western Front in World War I* (Novato, CA: Presidio Press, 1994), 216.

<sup>65</sup>Gudmundsson, *Stormtroop Tactics*, 158-160; Johnson, *Breakthrough!*, 218-219.

Lieutenant Colonel George Bruchmüller only chose highly motivated, physically and mentally fit soldiers to command in the storm battalions.

Because German soldiers, since 1914, were living a monotonous life defending their trenches and not advancing, the German high command acknowledged the need to train on a new aggressive attack doctrine if they were to gain ground on enemy territory.<sup>66</sup> The storm battalions filled the doctrine's requirement for specialized aggressive troops, essential for taking the initiative from the attacking enemy.<sup>67</sup> The first candidates for the ad hoc storm battalions did not meet the strict disciplinary requirements, because the tasked commanders sent their worst soldiers instead of the most qualified ones.<sup>68</sup> This changed between 1915 and 1917, as candidates went through heavier screening to meet the strict requirements: to be no older than 25 years old, physically and mentally tough, single, athletic, motivated, and highly aggressive.<sup>69</sup> This selective system of storm battalion recruits made it difficult to replace their combat losses.

The storm battalions needed many replacements because their aggressiveness and dangerous missions in battle that resulted in very high casualties. Replacements for the storm battalions came at a cost of depleting the regular units' manpower reserves which,

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<sup>66</sup>Lupfer, *The Dynamics of Doctrine*, 27; Paschall, *The Defeat of Imperial Germany*, 24.

<sup>67</sup>Holmes, *The Western Front*, 155; House, *Toward Combined Arms Warfare*, 26-27.

<sup>68</sup>Gudmundsson, *Stormtroop Tactics*, 79.

<sup>69</sup>Samuels, *Doctrine and Dogma*, 29.

by 1917, led to lowering the personnel selection standards.<sup>70</sup> The reason for lowering the standards was the demand for entire storm divisions. By late 1917, the German field armies were tasked to form entire storm divisions each, in preparation for the upcoming Spring or “Peace” Offensive on the Western Front in 1918. The formation of the storm divisions depleted much of the regular German divisions’ combat strength on the Western Front, re-designating them as “trench divisions” (*Stellungdivisionen*) that could only secure the forward trenches until the offensive began.<sup>71</sup>

### Decentralized Leadership

Receiving feedback from your subordinates and delegating them authority are two examples of decentralized leadership. General Ludendorff illustrates this example when he wrote, “I went to Flanders in order to talk over the same questions with officers who had taken part in the fighting. Our defensive tactics had to be developed further, somehow or other. We were all agreed on that. I thought I ought to give way to the experience of officers at the front.”<sup>72</sup> Obviously, General Ludendorff acknowledged that his officers on the front lines had a better understanding of the operational environment than he did. That is why these officers were delegated the authority to modify their commander’s plans to shape their operations in battle to ensure success.<sup>73</sup> Every echelon

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<sup>70</sup>Gudmundsson, *Stormtroop Tactics*, 152.

<sup>71</sup>*Ibid.*, 151-152.

<sup>72</sup>Ludendorff, *Ludendorff’s Own Story*, 102-103.

<sup>73</sup>Gudmundsson, *Stormtroop Tactics*, 172.

of the German officer corps conversed in one way or the other to create new guidelines for doctrines.<sup>74</sup>

The offensive doctrine required the storm battalions' to have competent leadership to make command decisions at a moment's notice.<sup>75</sup> For example, the tactical level commanders, in order to save time, had to be delegated the authority in committing the necessary troops without authorization from operational-level commanders.<sup>76</sup> German officers had the freedom of initiative, which comes from the German army's decision-making doctrine.

The German army's decentralized leadership was rooted in the doctrine called "directive command" (*Führung nach Directive*), also known as "mission tactics" (*Auftragstaktik*).<sup>77</sup> The concept of directive command was that the tactical level commander on the front trench could make command decisions because he had a better situational awareness and understanding than his operational-level commander positioned farther back in the trenches.<sup>78</sup>

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<sup>74</sup>Erich Ludendorff, *Ludendorff's Own Story, August 1914-November 1918: The Great War from the Siege of Liege to the Signing of the Armistice as Viewed from the Grand Headquarters of the German Army* (New York: Harper & Brothers Publishers, 1919), 102-103; Wilhelm Balck, *Entwicklung der Taktik im Weltkrieg*, 2nd ed. (Berlin, 1922); Eugène Carras, *La pensée militaire allemande* (Paris, 1948), 335-43, paraphrased in Michael Geyer, "German Strategy in the Age of Machine Warfare, 1914-1945," 539.

<sup>75</sup>Lupfer, *The Dynamics of Doctrine*, 19.

<sup>76</sup>Wilhelm Balck, *Development of Tactics-World War*, trans. by Harry Bell (Fort Leavenworth, 1922), 14, paraphrased in Timothy T. Lupfer, *The Dynamics of Doctrine*, 20; Paschall, *The Defeat of Imperial Germany*, 24.

<sup>77</sup>Samuels, *Doctrine and Dogma*, 88.

<sup>78</sup>*Ibid.*, 89.

Directive command's two components were "commander's intent" (*Absicht*) and "tasks or roles" (*Aufträge*).<sup>79</sup> German officers exercised their initiative at the utmost, because the German army's "directive command" doctrine emphasized very broad or general intentions when issuing mission orders for any operation. This forced lower-level officers to formulate their own plans with little guidance from higher headquarters. An important aspect of directive command was that it discouraged commanders from reprimanding their junior leaders for any respectful disagreements.<sup>80</sup> Junior leaders had to make their command decisions, even if it was at odds with their commander's intent.<sup>81</sup> Executing a command decision and failing to achieve the decision's goal was not a serious penalty compared to making no decision under "mission tactics."<sup>82</sup>

The storm battalions' established their command culture with a decentralized leadership style using initiative, planning, and critical decision-making. This command culture came from the German army's "directive command" (*Führung nach Directive*) doctrine and was an integral part of German military culture.<sup>83</sup>

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<sup>79</sup>Ibid.

<sup>80</sup>Ibid.

<sup>81</sup>Ibid.

<sup>82</sup>*Exerzier-Reglement für die Infanterie, 1888*, amended to 1889 Para. II. 121, cited in Ibid.

<sup>83</sup>Citino, *The German Way of War*, 310.



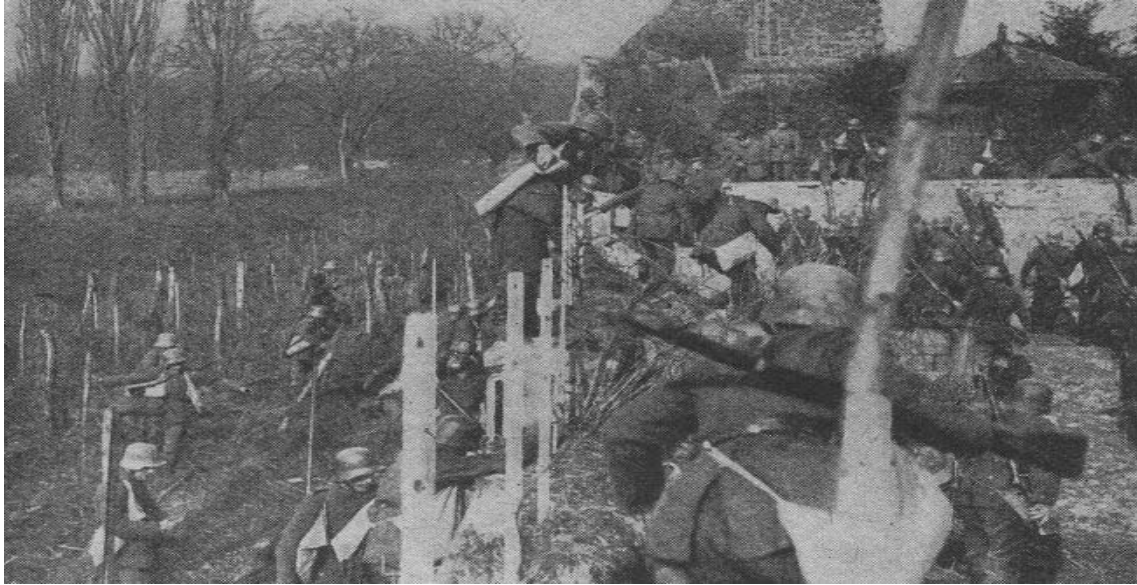


Figure 3. The storm troops of the 124th *Landwehr* Infantry Regiment practicing at Ollweiler training ground for a raid.

Source: trenchfighter.com, Website, Photo, <http://www.trenchfighter.com/40029/69301.html> (accessed February 2010).

#### Training on Small Unit Tactics and Advanced Weaponry

The new “military-machine culture” adopted by the German high command in 1916 streamlined the organizations of field armies and produced better combat leaders to fight successful battles.<sup>84</sup> These leaders used operational principles from accessible methods rather than obtaining them from obsolete doctrines.<sup>85</sup> In addition, German army emphasized teamwork through inter-unit, battle-focused training while enforcing rigorous

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<sup>84</sup>Michael Geyer, “German Strategy in the Age of Machine Warfare, 1914-1945,” 543.

<sup>85</sup>Ibid.

physical standards.<sup>86</sup> This placed an importance on training tactical junior leaders starting at the squad-level up to the division.<sup>87</sup> The German army's training methods also had to change with the new tactical doctrine's use of advanced weaponry.

Tactical doctrine reform challenged the German army on how to break the trench warfare stalemate.<sup>88</sup> The German army evaluated its troops and weapons capabilities through performance, not volume, as a method.<sup>89</sup> One advantage of this solution is that it combined the "assault power" (*Stosskraft*) and "firepower" (*Feuerkraft*).<sup>90</sup> The second method required the battlefield commander to accept more overall combined arms responsibility for direct and indirect fire support within his area of operations instead of the attached units providing that fire support.<sup>91</sup> This challenged commanders to maintain a constant situational awareness and understanding of the battlefield.<sup>92</sup> The last method

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<sup>86</sup>Hans-Ludger Borgert, "Grundzüge der Landkriegführung von Schlieffen bis Guderian," in *Deutsche Militärgeschichte 1648-1939*, ed. *Militärgeschichtliches Forschungsamt* (repr. Herrsching, 1983), 9:517-518, paraphrased in Michael Geyer, "German Strategy in the Age of Machine Warfare, 1914-1945," 540.

<sup>87</sup>Helmuth Gruss, *Die Deutschen Sturmbataillone im Weltkrieg: Aufbau und Verwendung* (Berlin, 1939); Balck, *Entwicklung der Taktik*; Seesselberg, *Stellungskrieg*, paraphrased in Michael Geyer, "German Strategy in the Age of Machine Warfare, 1914-1945," 541.

<sup>88</sup>Samuels, *Doctrine and Dogma*, 34.

<sup>89</sup>*Ibid.*, 35.

<sup>90</sup>*Ibid.*

<sup>91</sup>*Ibid.*

<sup>92</sup>Samuels, *Doctrine and Dogma*, 35; Hubert C Johnson, *Breakthrough!: Tactics, Technology, and the Search for Victory on the Western Front in World War I* (Novato, CA: Presidio Press, 1994), 198.

required the integration all infantry weapons and maximizing their effectiveness based on the weapons capabilities within a battalion such as rifles, machine-guns, trench mortars, flame-throwers and field artillery.<sup>93</sup> Storm troop tactics (*Stosstrupptaktik*) was the endstate of these methods and a milestone for the creation of an offensive tactical doctrine for the storm battalions.<sup>94</sup> The storm battalions' made the (*Stosstrupptaktik*) offensive doctrine the standard for training German army infantry units from 1916 until the end of World War I.<sup>95</sup> With the doctrinal standard established, the storm battalions expanded their training methods to the rest of the German army.

When not employed in battle, the storm battalions trained themselves or gave "train the trainer" instruction on tactics and weapons to officers and NCOs from regular infantry units so they could pass on their newly acquired skills to create storm units of their own. The student officers and NCOs attended a four weeks' course in storm troop tactics and weapons.<sup>96</sup> In addition, tactical training involved infantry-artillery cooperation and communications.<sup>97</sup>

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<sup>93</sup>Samuels, *Doctrine and Dogma*, 36.

<sup>94</sup>*Ibid.*

<sup>95</sup>*Ibid.*, 31.

<sup>96</sup>U.S. War Department. Historical Section, General Staff, A.E.F. Tactical Studies No. 1. *A Survey of German Tactics, 1918* (Washington, DC: Government Printing Office, 1918), 18-19.

<sup>97</sup>*Ibid.*, 6.

A German army order, captured by Canadian trench raiders, published on a Canadian Corps intelligence report dated 11 October 1916, illustrates the selection of personnel and the type of training the storm troops receive:

A captured German order (regiment unknown probably 361st Regt.) shows that companies sometimes form their own Sturm Trupps. The three regiments of the 28<sup>th</sup> Reserve Division each have a Sturm Trupp of 3 officers and 150 men. The men are mostly volunteers and are always of good physique. They undergo a four-week course and are specially trained in bomb throwing and advancing over heavily shelled ground. They are trained for the storming of important positions or the recapture lost ones and these are the only occasions on which they are used as a unit. Each Trupp includes 6 N.C.Os. and 6 men who are specially trained in the use of the light T.M. (Trench Mortar) known as the “Priestor-werfer” which fires a small fish tailed bomb. When the Sturm Trupp is not engaged as a unit, the men work with their companies and prisoners estimate that in the case of a regiment it would take at least four hours to assemble the Trupp for counter-attack. All regiments in the German army appear to have formed “Sturm Trupps”, but certain “flying divisions”, of which the 2nd Guard Reserve Division is one, have a “Sturm Battalion” and no regimental Sturm Trupps.<sup>98</sup>

A German sergeant assigned to a storm battalion in the winter of 1917 described the training:

We had to drag machine guns, fling bombs, advance along trenches and crawl without a sound. At first, it was a severe strain on me. I sweated on every occasion and several times everything reeled around me, but only for a short time. Then, daily it grew easier. We were on duty from morning to night with only two to three hours of an interval at midday. I had no time for reflection and felt in good trim.<sup>99</sup>

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<sup>98</sup>Canadian Corps, General Staff, “Summary of Intelligence, Part II: Assault Troops (Sturm Trupps)” 11 October 1916, 205, War Diaries, NAC, RG9, MD, Series III-D-3, Volume 4813, Reel T-7175, File: 7. <http://data2.collectionscanada.ca/e/e040/e000997695.jpg>, (accessed 28 March 2010).

<sup>99</sup>Ludwig Renn, *War*, English ed. (London: Martin Secker Ltd., 1929), 298.

The storm battalion's final training product on the new doctrine resulted in the "deliberate counterattack" (*Gegenangriff*) or "immediate counterattack" (*Gegenstoss*).<sup>100</sup> The counterattack would begin with squad-size storm troops (*Stosstrupp*) in the outer outpost zone; followed by company sized storm troops (*Sturmkompanie*) in the intermediate battle zone; and then the storm battalion (*Sturm bataillon*) as the reserve battalion in the rearward zone of defense.<sup>101</sup> The storm battalions expanded into storm divisions by the winter of 1917-1918, in preparation for the upcoming Spring Offensive in March 1918.

These storm divisions were trained on the same *Attack in Position Warfare* doctrine like the storm battalions, on a wider scale. The doctrine began with a brief artillery barrage on targets, carefully sighted, and used high explosive and poison gas shells.<sup>102</sup> German storm battalions used unit tactics (*Stosstrupptaktik*) that allowed them to first use skirmishers or scouts to ascertain potential avenues of approach or paths of least resistance.<sup>103</sup> The purpose was to get to the flanks or to the rear of any enemy strong points.<sup>104</sup> These approaches were exploited by the first wave of light machine gunners, grenade throwers (bombers) and riflemen to protect their flanks.<sup>105</sup> All waves moved in

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<sup>100</sup>Wynne, *If Germany Attacks*, 157.

<sup>101</sup>Wynne, *If Germany Attacks*, 157; Lupfer, *The Dynamics of Doctrine*, 18; Samuels, *Doctrine and Dogma*, 73-80.

<sup>102</sup>U.S. War Department, *A Survey of German Tactics, 1918*, 30-33.

<sup>103</sup>*Ibid.*, 8-13.

<sup>104</sup>*Ibid.*

<sup>105</sup>*Ibid.*

bounds and rushes, using the advantage of cover and concealment, while adjacent units provided mutual direct fire support for each other to allow them to advance.<sup>106</sup> If the enemy strongpoint was too built-up for the first wave to destroy, the second wave came in with heavy machine guns, trench mortars, light field guns, and flamethrowers.<sup>107</sup> This allowed the first wave to advance even further, eventually to disrupt the enemy's command and control structure, communications, and artillery in the rear trench.<sup>108</sup> To maximize the tactical effectiveness of small unit tactics, the German storm battalions planned every phase of the attack in detail and decentralized their planning so everyone understood their commander's intent and concept of the operation.<sup>109</sup> Preparations for the attack, made under the cover of darkness, positioned main weapons systems like the field guns, carefully camouflaged to prevent any enemy observation that might warn them of an impending attack.<sup>110</sup>

The storm battalions put these new tactics to the test against the Allies' positions on the Western Front with positive and negative results. The storm troop battalion's first combat test was an assault on the French in the *Schrätzmannle* and *Hartmannsweilerkopf* emplacements in the Vosges Mountains in 1916.<sup>111</sup> These successful engagements were

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<sup>106</sup>Ibid.

<sup>107</sup>The shock effect of flamethrowers on the Western Front was described by Bruce Gudmundsson, *Stormtroop Tactics*, 45.

<sup>108</sup>U.S. War Department, *A Survey of German Tactics, 1918*, 8-13.

<sup>109</sup>Ibid.

<sup>110</sup>Ibid.

<sup>111</sup>Gudmundsson, *Stormtroop Tactics*, 49.

preliminary tests to evaluate the storm troop battalion's performance in preparation for the Battle of Verdun.<sup>112</sup> The Spring Offensive in 1918 was a final attempt to defeat the British and French armies in order to relieve pressure on Germans before the American Expeditionary Force arrived to engage them. The storm troop divisions achieved initial success against the British army's front line and intermediate trench systems. However, they advanced too fast for the follow-on support units to come forward from rearward areas. As a result, the storm troop units reached their culmination point, forcing them to a halt.<sup>113</sup> This allowed time for the British units to reconstitute a new defensive line, bring up their operational reserve, and mount a massive counterattack from their secondary trench system.<sup>114</sup> This significantly reduced the German army's momentum in the offensive.<sup>115</sup> Even though the Spring Offensive eventually failed, the storm troop tactics were instrumental in the creation of the *blitzkrieg* in World War II.<sup>116</sup>

The AEF General Staff Historical Section illustrates the employment of the German Storm troop battalions and their higher headquarters in 1918 on the next page:

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<sup>112</sup>Ibid.

<sup>113</sup>U.S. War Department, *A Survey of German Tactics*, 1918, 1-2.

<sup>114</sup>Ibid.

<sup>115</sup>Ibid.

<sup>116</sup>Correlli Barnett, *The Swordbearers: Supreme Command in the First World War* (New York: Signet Books, The New American Library, Inc., 1963), 290-291.

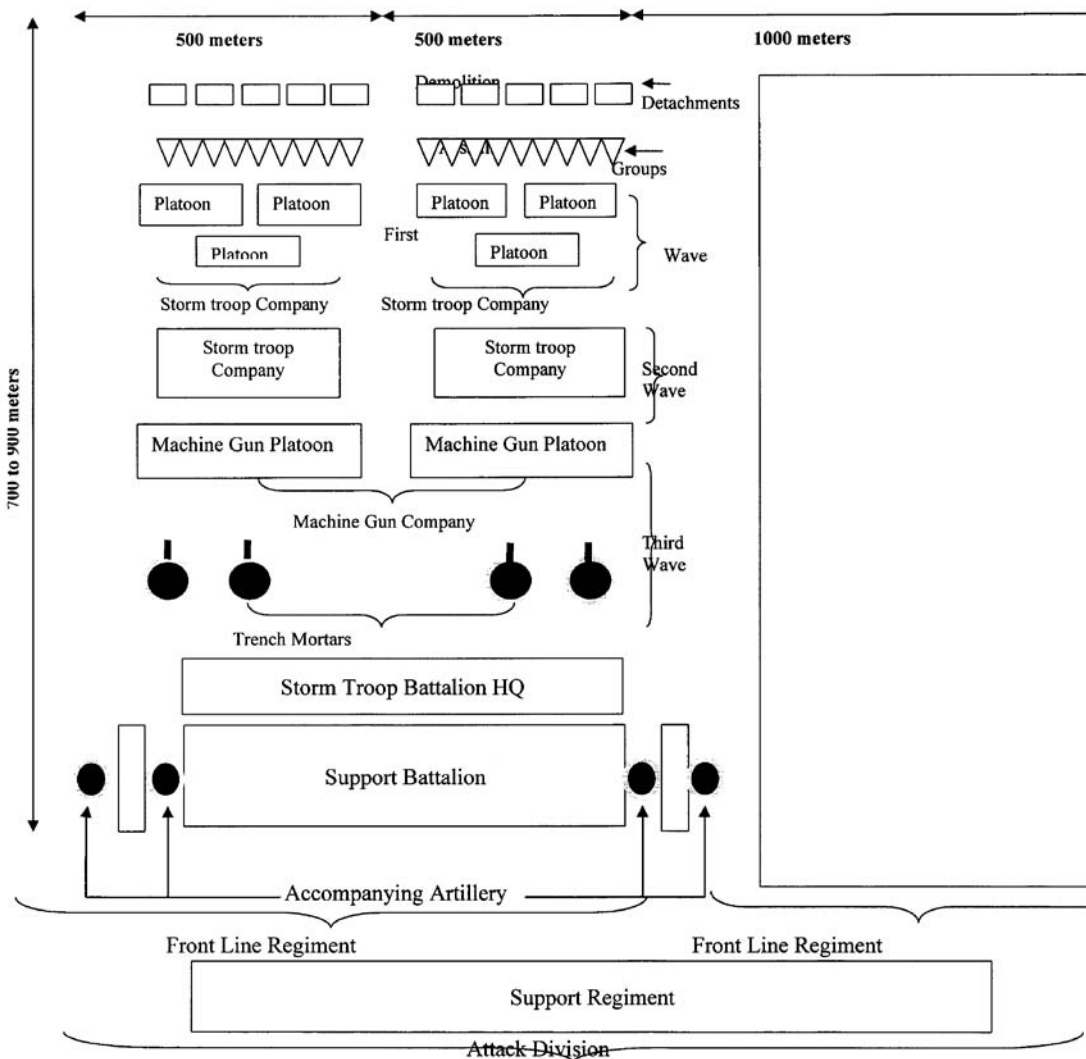


Figure 4. Breakdown of a German Storm Division - 1918  
Source: U.S. War Department, A Survey of German Tactics, 1918, 9.

In conclusion, the German army's adoption of the military machine culture in 1916, established a series of tactical innovations to increase combat effectiveness and reduce casualties. This was a response to the catastrophic losses suffered at the Battle of the Somme. In addition, the German army lost the war of material (*Materialschlacht*) against the Allies and sought an alternate course of action. The German army's



exploitation of storm troop tactics was forced on them by material and manpower limitations. In addition, German high command's strategy for the army to keep a defensive posture on the Western Front until the German army achieved victory on the Eastern Front led to the development of the elastic defense-in depth doctrine.

This led, in turn, to the decentralized force restructuring of the German army, represented by an army-wide reorganization of tactical-level units, which led to the creation of the storm battalions. The force re-structuring generated the innovation and development of the elastic defense-in-depth doctrine. This doctrine, in which its scheme of maneuver included the counterattack, provided the window of opportunity for the implementation and employment of the storm battalions. The reason is that the storm battalions were the perfect means to the new tactical offensive doctrine that emphasized aggressiveness to support the defense-in-depth's final counterattack phase.

## CHAPTER 3

### CANADIAN RAIDING PARTIES

Whenever the Germans found the Canadians Corps coming into the line, they prepared for the worst.<sup>117</sup>

— British Prime Minister David Lloyd George

I hope that the Canadians are not in the trenches opposite you, for they on the darkest night jump suddenly into our trenches, causing great consternation and before cries for help can be answered disappear again into the darkness.<sup>118</sup>

— From a letter found on a captured German Soldier, 1917.

The British Expeditionary Force addressed the lessons learned from inactivity or “staleness” on the Western Front in the later years of World War I:

At the same time, the state of comparative inactivity, which is the normal condition of life in the trenches, is very unfavorable to the development of these qualities in officers and men. There is an insidious tendency to lapse into a passive and lethargic attitude, against which officers of all ranks have to be on their guard. Constant activity in harassing the enemy may lead to reprisals at first, and, for this reason is sometimes neglected, but, if persevered in, it always results in an ultimate mastery, it gives the troops a healthy interest and wholesome topics of conversation, and it achieves the double purpose of raising the morale of our own troops whilst lowering that of the enemy. And the fostering of the offensive spirit, under such unfavorable conditions, calls for incessant attention.<sup>119</sup>

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<sup>117</sup>David Lloyd George *War Memoirs of David Lloyd George* (London, 1936) VI, 3367.

<sup>118</sup>Andrew B. Godefroy, “A Lesson in Success: The Colonne Trench Raid, 17 January 1917,” *Canadian Military History* 8, no. 2 (Spring 1999): 25, <http://www.wlu.ca/lcmsds/cmh/back%20issues/CMH/volume%208/Issue%202/Godefroy%20-%20A%20Lesson%20in%20Success%20%20The%20Calonne%20Trench%20Raid,%2017%20January%201917.pdf> (accessed 1 January 2010).

<sup>119</sup>General Staff, B.E.F., “Notes for Infantry Officers on Trench Warfare” in *British Manual for Trench Warfare*, ch.1, para. 4 (December 1916).

The necessity for trench raiding appeared in writing on 5 February 1915, when the BEF commander, Field Marshal Sir John French, directed his Chief of General Staff to publish a memorandum ordering all field army and corps commands to conduct raids.<sup>120</sup>

However, Field Marshal French's intent for trench raiding was to counter the German raids that harassed the allies' trenches to maintain aggressiveness and avoid complacency while still maintaining a defensive posture.<sup>121</sup>

In December 1915, General Sir Douglas Haig succeeded Field Marshal French as commander in chief of the BEF. General Haig, and the Canadian Corps commander, Lieutenant General E.A.H. Alderson, also sanctioned trench raiding. However, General Haig's intent on trench raiding was more offensive-minded than his predecessor's, as he wanted trench raids to serve as initial, limited offensive operations prior to much larger ones. In late 1915, the French army already conducted a transfer of authority of a Western Front section over to the BEF near the town of Arras in Northern France.<sup>122</sup> General Haig was motivated to go on the offensive when his command noticed the lack of activity in this section inherited from the French army.<sup>123</sup>

Before the BEF took over that section of the French lines, a ceasefire had existed between the French and the Germans, and there were no offensive operations conducted

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<sup>120</sup>W.R. Robertson, Chief of the General Staff, B.E.F., *G.H.Q. Memorandum Ordering Raids*, British Army in the Field, Operations Section, O.A. 447, 5 February 1915, repr. in Edmonds, *History of the Great War, 1915*, 33-34.

<sup>121</sup>Edmonds, *History of the Great War, 1915*, 31; Hew Strachan, *The First World War*. (New York: Penguin Books, 2003), 167.

<sup>122</sup>Edmonds, *History of the Great War, 1916*, 155.

<sup>123</sup>*Ibid.*, 156.

by either side.<sup>124</sup> General Haig and his general headquarters (G.H.Q.) found this “live and let live” policy, unacceptable, and encouraged more offensive operations.<sup>125</sup> This was in order to gather intelligence, reduce German strong points, reserves, and morale with the intent to reduce Allied casualties.

All armies on the Western Front conducted trench raiding during World War I. The Germans and the Allies alike viewed the Canadians as experts in trench raiding.<sup>126</sup> Sir Douglas Haig, commander-in-chief of the BEF, had an exceptional view of the Canadians for their competence in conducting trench raids.<sup>127</sup> The British first initiated and directed trench raiding. However, the Canadians rising effectiveness in trench raiding was evident to their small-unit infantry skills of moving tactically while demonstrating elasticity, ingenuity, and fierceness.<sup>128</sup> Canadian military culture of autonomy, adaptation, and innovation ensured the necessary force structure, institutional support, personnel selection, decentralized leadership, training in small units tactics and advanced weaponry led to the tactical effectiveness of the Canadian trench raiders.

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<sup>124</sup>Ibid.

<sup>125</sup>Ibid.

<sup>126</sup>Godefroy, “A Lesson in Success: The Colonne Trench Raid, 17 January 1917,” 25.

<sup>127</sup>Desmond Morton, *When Your Number's Up* (Toronto: Random House of Canada, 1993), 126, paraphrased in, “A Proper Slaughter: The March 1917 Gas Raid at Vimy Ridge” by Tim Cook, *Canadian Military History*, 8, no. 2 (Spring 1999): 9, <http://www.wlu.ca/lcmsds/cmh/back%20issues/CMH/volume%208/Issue%202/Cook%20-%20A%20Proper%20Slaughter%20-%20The%20March%201917%20Gas%20Attack%20at%20Vimy%20Ridge.pdf> (accessed 1 January 2010).

<sup>128</sup>Godefroy, “A Lesson in Success: The Colonne Trench Raid, 17 January 1917,” 25.

### Force Structure

Canadian military culture was included the desire for autonomy from Great Britain. The Canadian Corps illustrated its dissimilarities from most other British units in that it was loyal to Canada, and not to the British government.<sup>129</sup> Canadian Corps' commanders had the right to disregard BEF orders and directives deemed counterproductive or violated the corps' integrity, which to the BEF, made the Canadian Corps an almost independent dominion army.<sup>130</sup>

Before World War I, the Canadian army's force structure consisted of two elements. The first element was the permanent active militia of 3,110 personnel.<sup>131</sup> The second element was the non-permanent active militia of 74,213 personnel, which represented the majority of the Canadian army's combat power.<sup>132</sup> This pre-war force structure, particularly the militia, had some disadvantages. The militia had received little or no training in modern trench warfare, and there was a critical shortage of experienced professional officers and senior non-commissioned officers to train them.<sup>133</sup> In addition, the militia, poorly disciplined, lacked the necessary uniforms, weapons, and equipment to

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<sup>129</sup>Shane B. Schreiber, *Shock Army of the British Empire: The Canadian Corps in the Last 100 days of the Great War*, forward by John A. English: Praeger Series in War Studies (Westport, CT: Praeger Publishers, 1997), 19.

<sup>130</sup>*Ibid.*; Morton, *A Military History of Canada*, 161.

<sup>131</sup>Nicholson, *The Official History of the Canadian Army in the First World War*, 12.

<sup>132</sup>*Ibid.*

<sup>133</sup>*Ibid.*, 7.

prepare them for the Western Front.<sup>134</sup> The Canadian 1st Division, subordinate to the British III Corps, suffered severe casualties after the Battle of Ypres in 1915 because of its inexperience in leadership and lack of training and equipment.<sup>135</sup>

These losses led to the Canadian Expeditionary Force's (CEF) leadership to establish the Canadian Corps when the Canadian 2nd Division arrived in France in June 1915 with the 3rd and 4th Divisions following thereafter. It was larger than any corps in the BEF. The Canadian divisions held an evident advantage over the subsequent British divisions in comparative assets, together with 15,000 divisional troops for a British infantry division measured up to a Canadian division of 21,000 men.<sup>136</sup> These divisions were organic to the Canadian Corps, which made it more cohesive and independent of other BEF or allied corps. The Canadian Corps effectively maintained its integrity in terms of organization, leadership, and order of battle.<sup>137</sup> The British official history of the Great War reflects this, when it addressed the Battle of Passchendaele: "The capture and retention of Passchendaele high ground reflects the high standard of the staff work and training of the Canadian Corps and its four divisions . . . the tenacity and endurance of

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<sup>134</sup>Ibid., 25.

<sup>135</sup>Ibid., 103-104.

<sup>136</sup>Arthur Currie, "Organization of the Canadian Corps in the Field," Currie Papers, folder 2 drawer1801, paraphrased in Ibid., 232.

<sup>137</sup>Paddy Griffith, *Battle Tactics of the Western Front: The British Army's Art of Attack, 1916-18* (New Haven & London: Yale University Press, 1994), 81.

Canada's splendid contribution to the British Imperial Forces were manifest."<sup>138</sup> With its force integrity, the Canadian Corps distinguished itself in key engagements into 1918 that were decisive to the BEF's operational mission.<sup>139</sup> However, the BEF presented another challenge to the Canadian Corps' homogeneous force structure after the Battle of Passchendaele.

Due to serious personnel losses after the Battle of Passchendaele in October-November 1917, the British Imperial General Staff purposed in January 1918 that all infantry brigades in the BEF including the Canadian Corps consolidate their battalions, to create replacements and build more units.<sup>140</sup> The Canadian Corps commander at the time, Lieutenant General Arthur Currie, was against this proposal and wrote a letter of protest to Sir Edward Kemp, the Canadian Minister of the Overseas Military Forces on 7 February 1918:

With reference to the question as to whether the Canadian Corps should be reorganized, into divisions consisting of nine battalions each, I am strongly against this proposal. My reasons are as follows: The Canadian Corps has proved itself to be an effective and smoothly working fighting machine. To alter its constitution would be to run a very great risk of reducing the striking value of the force, with no compensating advantages. The suggested reorganization would not entail, as in the case of Imperial formations, the disbandment of one battalion, in each brigade, but a re-shuffling of existing battalions in order to reduce existing brigades to three battalions each and to form new brigades. The four battalions composing existing Canadian infantry brigades have served together under many conditions and have fought side by side in many successful battles. Strong

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<sup>138</sup>James E. Edmonds, *History of the Great War, Based on Official Documents: Military Operations, France and Belgium, 1917*, vol. 2 (London: MacMillan and Co., Limited, 1948), 359.

<sup>139</sup>Nicholson, *The Official History of the Canadian Army in the First World War*, 232.

<sup>140</sup>*Ibid.*, 231-232.

feelings of *esprit de corps* and comradeship have been engendered by this common building up of high traditions. I recommend the addition of 100 men surplus to the establishment of each Canadian infantry battalion. This would increase the fighting strength of the Corps by 1,200 more men. It is essential that the 100 men per battalion should be part of the battalion, and should be in no way regarded as reinforcements under the control of the Deputy Adjutant General, Base.<sup>141</sup>

General Currie's actions to preserve the Canadian Corps' force structure enabled units down to the battalion level the flexibility and continuity of leadership to plan and execute trench raids.<sup>142</sup> Historian Ian M. Brown argues that the Canadian Corps' force integrity gave them an advantage in efficiency over the rest of the BEF by delegating more command and control authority to their battalions.<sup>143</sup> A World War I Canadian Corps report, states:

The Canadian Corps controlled its own reinforcements, and thus could be sure of having enough men. . . . The units . . . were accustomed to living and fighting together, the Corps and Divisional staffs accustomed to working together,

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<sup>141</sup> Arthur Currie, "Letter to Sir Edward Kemp, 7 February 1918," reel C4330, vol. 98, BP, Library and Archives of Canada, cited in *The Selected Papers of Sir Arthur Currie: Diaries, Letters, and Report to the Ministry, 1917-1933*, ed. Mark O. Humphries (Waterloo, ON: Wilfrid Laurier University Press, 2008), 81-83.

<sup>142</sup> 21st Canadian Infantry Battalion, "Operation Order No. 73, Conducting a Raid" 16 January 1917, NAC, WD, RG9, MD, Series III-D-3, vol. 4930, reel T-10731, file 410, access code 90, <http://data4.collectionscanada.gc.ca/e/e039/e000961482.jpg> (accessed 23 January 2010); 7th Canadian Infantry Battalion, "Operation Orders No. 59, Conducting a Raid," 15 November 1915, NAC, WD, RG9, MD, Series III-D-3, vol. 4826, reel T-7186, file: 46, access code 20, <http://data2.collectionscanada.ca/e/e041/e001013883.jpg> (accessed 29 January 2010).

<sup>143</sup> Ian M. Brown, "Not Glamorous, But Effective: The Canadian Corps and the Set-Piece Attack, 1917-1918," *The Journal of Military History* 58, no. 3 (July 1994): 425.



and the Canadian Corps thus became a homogeneous, self-contained and mobile force.<sup>144</sup>

With this new force structure setting, the Canadian Corps' subordinate commands down to the battalion level were able to task organize the raiding parties. The size of the raiding parties ranged from 10 to 200 men, depending on the mission requirements.<sup>145</sup> Companies or platoons usually organized and conducted raids. A typical task organization of a raiding party, described by the 7th Canadian Infantry Battalion's trench raid operations order, which took place on the Douve River in France on 17 November 1915:

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<sup>144</sup>Unsigned Manuscript, "The Canadian Corps--Principle Differences Between the Canadian Corps and British Corps," NAC, WD, RG 9, III, D2, vol. 4809, file 196, quoted in Schreiber, *Shock Army of the British Empire*, 24.

<sup>145</sup>James E. Edmonds, *History of the Great War, Based on Official Documents: Military Operations, France and Belgium, 1916*, vol. 1, appx. 6 (London: MacMillan and Co., Limited, 1932), 156.

<u>Wire cutting party (scouts)</u>		(5) <u>Trench Rifle Party</u>
1 Officer and 4 N.C.O.s		1 Officer (O.C. of Assault Party)
(1) <u>Left Bombing and Blocking Party</u>		5 Riflemen
1 Officer		1 Telephonist with instrument
2 Bayonet men		1 Lineman
2 Bomb throwers		2 Stretcher bearers
2 Bomb carriers		Total: 1 Officer, 9 men
1 Spare bomber		(6) <u>Listening Post Support Party</u>
4 Wire men (carrying 20 bombs each)		1 N.C.O. and 10 men
2 Shovel men (carrying 20 bombs each)		1 Telephonist with instrument
Total: 1 Officer, 13 men		1 Lineman
(2) <u>Right Bombing and Blocking Party</u>		Total: 13 men
1 Officer		(7) <u>Trench Reserve Party</u>
3 Bayonet men		2 N.C.Os. and 20 men
2 Bomb throwers		Remained in trench
2 Bomb carriers		
1 Spare man		
2 Wire men (each carrying spool of wire and twenty bombs)		
2 Shovel men (Each carrying 20 bombs; no rifles)		
Total: 1 officer, 12 men		
(3) <u>Bridge Covering Parties</u>	<b>Total:-</b>	Assaulting Party 3 Officers, 34 men
Right 3	Scouts and on Bridges	1 Officer, 10 men
Left 3	Support and Reserve	33 men
Total: 6 Riflemen <sup>146</sup>		

General Currie stressed the importance of force structuring down to the platoon level because he recognized the platoon as a combined arms unit, which will suffer if not sustained with men and material.<sup>147</sup> With the influx of conscripts coming from Canada, General Currie was able to augment each Canadian Corps battalion with 100 replacements, to prevent companies from consolidating platoons due to casualties.<sup>148</sup>

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<sup>146</sup>Ibid., 43-44.

<sup>147</sup>Arthur Currie, "Letter to Sir Edward Kemp, 7 February 1918," in Mark O. Humphries, ed., *The Selected Papers of Sir Arthur Currie: Diaries, Letters, and Report to the Ministry, 1917-1933*, 81-83.

<sup>148</sup>Ibid.

General Currie and his predecessors displayed the aggressive leadership required to provide the Canadian Corps' with the essential force structure, that provided their subordinate leaders with enough manpower to plan and execute trench raids on a grand scale.

### Institutional Support

The Canadian Corps' way of war from 1914-1918, stressed the maximizing of its tactical effectiveness by using a systematic, logical approach with their available material in order to accomplish its missions and enhance the survivability of its soldiers.<sup>149</sup> The Canadian Corps accomplished this with the institutional support from every echelon, which provided the in-depth planning of successive trench raids to reduce the German defenses and gather intelligence in preparation for larger attacks.<sup>150</sup> Even a field army ordered battalion size raids to create a diversion to another field army's assault.<sup>151</sup> The BEF acknowledged the advantage of the trench raids' operational and tactical effectiveness and directed its field armies to provide the institutional support to its subordinate corps' to establish their own trench raid procedures. The Canadian Corps'

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<sup>149</sup>Desmond Morton, *A Military History of Canada: From Champlain to Kosovo*. 4th ed. (Toronto: McClelland & Stewart Inc., 1999), 148.

<sup>150</sup>Nicholson, *The Official History of the Canadian Army in the First World War*, 234.

<sup>151</sup>*Ibid.*, 189. In mid-September 1916, the BEF Second Army directed the Canadian Corps to conduct ten raids with six of its battalions to divert the Germans' attention away from the BEF Fourth Army's assault in the Battle of Flers-Courcelette.

intelligence and reconnaissance organizations were arguably the most institutionally supporting echelons for trench raiding.<sup>152</sup>

General Currie and his staff learned about trench warfare reconnaissance and information gathering by observing the French army. He emphasized, after learning from the French, “I cannot lay too much stress on the importance attached by the French to this preliminary occupation of the line for reconnaissance purposes. Every man saw the ground over which he would have to attack; his objective was pointed out to him as well as the places where he might expect resistance and check.”<sup>153</sup> Field intelligence was a critical to detailed planning and training ensure the success of a raid. In the first phase of a trench raid, were a series of scouting patrols, to conduct reconnaissance of the German trench defenses.<sup>154</sup>

The necessity for intelligence data persisted up to the ultimate moment preceding a raid because of constant changes in German troop disposition, composition, and strength.<sup>155</sup> Alexander McClintock supports this claim when he recalled preparing for a

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<sup>152</sup>Ibid., 249.

<sup>153</sup>Arthur Currie, “Notes on French Attacks, North-East of Verdun in October and December 1916,” NAC,WD, RG 9, v. 4142, folder 6, file 2, p3., in Rawling, *Surviving Trench Warfare: Technology and the Canadian Corps, 1914-1918*, 162.

<sup>154</sup>HQ, 12th Canadian Infantry Brigade, “Report on Raid Carried Out by 72nd Canadian Infantry Battalion,” 17 February 1917, NAC, WD, RG9, Series III-D-3, vol. 4907, reel T-10698-10699, 2-3, <http://data2.collectionscanada.ca/e/e040/e001066135.jpg> (accessed 2 March 2010).

<sup>155</sup>Dan Jenkins, “The Other Side of the Hill: Combat Intelligence in the Canadian Corps, 1914-1918,” *Canadian Military History*, 10, no. 2 (Spring 2001): 10-11, <http://www.wlu.ca/lcmsds/cmh/back%20issues/CMH/volume%2010/issue%202/Jenkins%20-%20The%20Other%20Side%20of%20the%20Hill%20-%20Combat%20>

raid: “Our practice section was changed a little, several times, because aerial photographs showed that the Germans had been renovating and making some additions to the trenches.”<sup>156</sup> Even though aerial photographs presented an accurate reconnaissance tool, scouting patrols, through interrogating the Germans they captured, familiarized the raiding parties on changes in the German defenses that aerial reconnaissance did not detect.<sup>157</sup>

The primary means to gather intelligence was scouting patrols. The junior officers and NCOs chosen to lead future raids took soldiers, usually new replacements, on scouting patrols.<sup>158</sup> The Canadian Corps’ subordinate commands took General Currie’s guidance a step further by placing special emphasis on selecting experienced personnel and then any new replacements from Canada to conduct scouting patrols. The reason the Canadian Corps’ battalions chose replacements to go on scouting patrols was to get them acclimated with the environment and familiarize them with the enemy terrain as a part of their training.<sup>159</sup>

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Intelligence%20in%20the%20Canadian%20Corps,%201914-1918.pdf (accessed 1 January 2010).

<sup>156</sup>Alexander McClintock, *Best O’Luck: How a Fighting Kentuckian Won the Thanks of Britain’s King* (New York: George H. Doran Company, 1917), 64, <http://books.google.com/books?id=kapHAAAAIAAJ&ots=IX8j-m1l00&dq=alexander%20mcclintock&pg=PR3#v=onepage&q&f=false> (accessed 15 May 2010).

<sup>157</sup>Canadian Corps General Staff, “Summary of Intelligence, from 27th Sept. to 4th October 1917, Enemy Defences,” 4 October 1917, WD, NAC, RG9, MD, Series III-D-3, Volume 4816, Reel T-7177, File: 13: p2, <http://data2.collectionscanada.ca/e/e041/e001002624.jpg> (accessed 28 March 2010).

<sup>158</sup>Godefroy, “A Lesson in Success,” 28.

<sup>159</sup>*Ibid.*

During this phase, the scouts would go on night patrols to reconnoiter the most likely primary and alternate infiltration routes towards the German trenches, in the weeks prior to the trench raid.<sup>160</sup> The scouts' criteria for choosing the routes were cover and concealment, and weak points along the German defenses.<sup>161</sup> These weak points often were areas where the German barbed wire was less concentrated and a potential entry point into their trenches.<sup>162</sup> From there, the next criteria was to find good flanking positions against German crew-served weapons and other strong points, and vantage points where the scouts could position themselves along with snipers during the actual raid to provide security.<sup>163</sup> In addition, listening posts were established to listen to Germans chatting, in order to analyze their alertness.<sup>164</sup> The trench raid plans that included the information from the scouting patrols, aided the officers tasked to lead the raid.<sup>165</sup>

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<sup>160</sup>HQ, 12th Canadian Infantry Brigade, "Report on Raid Carried Out by 72nd Canadian Infantry Battalion," 17 February 1917, 2-3.

<sup>161</sup>*Ibid.*

<sup>162</sup>Bill Rawling, *Surviving Trench Warfare: Technology and the Canadian Corps, 1914-1918* (Toronto: University of Toronto Press, 1992), 104.

<sup>163</sup>N.V.M. Odlum, "Appendix IV, Report on Minor Operations," 19 November 1915, in 2nd Canadian Infantry Brigade, "Report on Enterprise at Le Petite Douve," 17 November 1915, NAC, WD, RG9, III-D-3, vol. 4826, reel T-7186, File: 49, p2-3, <http://data2.collectionscanada.ca/e/041/e001013887.jpg> (accessed 29 January 2010).

<sup>163</sup>*Ibid.*, 3.

<sup>164</sup>Jenkins, "The Other Side of the Hill," 9.

<sup>165</sup>N.V.M. Odlum, "Report on Minor Operations, 19 November 1915," 7.

On the night prior to the trench raid, the scouts would infiltrate back to the German trenches and perform route clearances, and make breaches in the German barbed wire.<sup>166</sup> The scouts would then return to the Canadian trenches, where the designated release point for the raiding party was, and direct them to that point so they could commence the raid.<sup>167</sup> Back in the planning phase, with the intelligence on the German trench defenses provided by the scouts, the next phase of the trench raid was rehearsals.<sup>168</sup> The Canadian Corps' ability in gathering field intelligence provided the necessary tools for detailed planning of raids. This is evident by the accounts of a Canadian Corps trench raider on his first raid:

Once we started, we were neither fearful, nor rattled. We drilled so long and so carefully that each man knew just what he was to do and he kept right on doing it unless he got hit . . . the German trenches were practically just as we had expected to find them. . . . They were so nearly similar to the duplicate section in which we had practiced that we had no trouble finding our way in them.<sup>169</sup>

#### Personnel Selection

The BEF required all divisions, to conduct raiding on a weekly basis but the Canadian Corps exceeded that requirement.<sup>170</sup> Because of Canadian Corps' higher frequency of raids, it delegated the battalions to select, their trench raiders.<sup>171</sup> Unlike the German storm troop battalions, the Canadian Corps did not have strict prerequisite

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<sup>166</sup>Ibid.

<sup>167</sup>Ibid.

<sup>168</sup>Ibid., 2-3.

<sup>169</sup>McClintock, *Best O'Luck*, 76 and 84.

<sup>170</sup>Rawling, *Surviving Trench Warfare*, 102.

<sup>171</sup>N.V.M. Odum, "Report on Minor Operations, 19 November 1915," 3.

screening for potential candidates to become trench raiders. The battalions delegated junior officers to lead the raids and choose their own personnel with the help of their NCOs.<sup>172</sup> Herbert W. McBride gives a first-hand narrative of how his chain of command chose personnel for trench raids.

Next comes the selection of men-and that is the hardest part of all. These *shows* are usually taken over in turn by all the young and enterprising subalterns in the outfit and each will have to make his own selection from the available men at his command. He would hate to go outside his own platoon for help as these things are matters of pride to all the members of whatever unit is engaged. If he has plenty of seasoned soldiers his task will be easy but if, as is often the case, he is overstocked with new replacements, he will have to do a lot of guessing-and trust the Lord. One false move, on the part of a single man, may ruin the enterprise.<sup>173</sup>

In other cases, Canadian Corps units had enough volunteers to go on raids. For example, Alexander McClintock recalled that his entire battalion volunteering for a raid when only sixty men were required.<sup>174</sup> Another example is the 7th Canadian Infantry Battalion, which conducted an almost flawless raid on the German trenches near the Douve River in France on 17 November 1915. The battalion commander, Lieutenant Colonel N.V.W. Odium, chose his own junior officers to lead the raid and gave them a full outline of the plan. In turn, the junior officers were “allowed to select their own men. This they did from volunteers. They had a pick of the regiment; but an effort was made to get as many men as possible from one company, so that they would know each other

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<sup>172</sup>Ibid.

<sup>173</sup>Herbert W. McBride, *A Rifleman Went To War* (1935; repr., Mt. Ida, Arkansas: Lancer Militaria, 1987), 126-127.

<sup>174</sup>McClintock, *Best O’Luck*, 63.



well.”<sup>175</sup> The personnel selection for trench raiding was usually on a volunteer basis, along with selecting replacements to acclimate them for trench warfare.

### Decentralized Leadership

Decentralized leadership was critical factor to ensure success of trench raids. The basic tactical unit for trench raiding was the platoon. While the enlisted personnel became skilled at their individual combat tasks, the NCOs learned to be efficient squad and platoon sergeants while the junior officers learned how to be inspiring platoon commanders.<sup>176</sup> Afterwards, platoons conducted their collective task training to combine all individual leadership, tactical, and weapons tasks to execute minor operations.<sup>177</sup> When the platoons were trained and organized, battalion commanders used their initiative to task organize platoons to conduct trench raids at their own discretion based on their division headquarters requirements. A junior officer chosen to lead a raid received a detailed concept of the operation and scheme of maneuver on how the commander wanted him to accomplish the raid.<sup>178</sup>

When the area of the German trenches to raid was decided, “The next step was to arrange the composition of the party. This was done by considering the various duties to be performed both inside the enemy trenches and in maintaining communication and cover, and in allotting adequate parties for each, and then providing sufficient officers to

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<sup>175</sup>N.V.M. Odlum, “Report on Minor Operations, 19 November 1915,” 3.

<sup>176</sup>Rawling, *Surviving Trench Warfare*, 137.

<sup>177</sup>*Ibid.*

<sup>178</sup>*Ibid.*, 103-104.

make leadership possible at every point.”<sup>179</sup> Two officers selected to lead the assault and blocking parties, continued rehearsals with their men in much repetition.<sup>180</sup> One officer selected to maintain command and control during the raid, was busy setting up communications by either field telephone or wireless Morse code.<sup>181</sup> One officer was to “supervise the communications, direct the scouts, lay the obstacle bridges, take charge of prisoners, and provide reinforcements when needed.”<sup>182</sup> A fifth officer was the overall officer in charge of the raid.<sup>183</sup>

When volunteering for a raid, Alexander McClintock was transported twenty miles to the training area where they rehearsed on practice trenches identical to the German ones based on the latest intelligence.<sup>184</sup> The trench raiders were relieved of any other tasks and were quartered together.<sup>185</sup> To avoid German observation, McClintock said, “Certain ‘skeleton trenches,’ in the practice section, were dug simply to fool the German aviators.”<sup>186</sup>

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<sup>179</sup>N.V.M. Odlum, “Report on Minor Operations, 19 November 1915,” 2.

<sup>180</sup>*Ibid.*

<sup>181</sup>*Ibid.*

<sup>182</sup>*Ibid.*

<sup>183</sup>*Ibid.*

<sup>184</sup>McClintock, *Best O’Luck*, 63-64.

<sup>185</sup>N.V.M. Odlum, “Report on Minor Operations, 19 November 1915,” 3; McClintock, *Best O’Luck*, 63-64.

<sup>186</sup>McClintock, *Best O’Luck*, 63-64.

The raiding party's officers, quartered next to the battalion headquarters, stayed near the battalion staff to recommend any needed adjustments to the operations order.<sup>187</sup> The raid leader would conduct a personal reconnaissance with his subordinate leaders on the possible avenues of approach into the German trenches.<sup>188</sup> Afterwards, the raid leader and the battalion staff officers from all branches would conduct coordinated briefs and meetings.<sup>189</sup> All chosen officers received written plans on the battalion level raid.<sup>190</sup> Finally, the raid's designated leaders would take the raiding party's enlisted personnel "in small detachments over the actual route they were to travel."<sup>191</sup> The operations orders for the raid were disseminated down to the lowest ranking personnel and recommendations were made.<sup>192</sup>

The real benefit to the Canadian Corps' conducting trench raids was detailed mission analysis and planning courses of action.<sup>193</sup> The junior to senior officer involvement in planning and conducting raids exemplifies how decentralized leadership is crucial in the success of raids. The success of these raids was crucial, as they were the

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<sup>187</sup>N.V.M. Odlum, "Report on Minor Operations, 19 November 1915," 3.

<sup>188</sup>HQ, 12th Canadian Infantry Brigade, "Report on Raid Carried Out by 72nd Canadian Infantry Battalion, 17 February 1917," 2.

<sup>189</sup>Rawling, *Surviving Trench Warfare*, 104.

<sup>190</sup>N.V.M. Odlum, "Report on Minor Operations, 19 November 1915," 3.

<sup>191</sup>*Ibid.*, 3.

<sup>192</sup>*Ibid.*, 3.

<sup>193</sup>Alex D. Haynes, "The Development of Infantry Doctrine in the Canadian Expeditionary Force: 1914-1918" *Canadian Military Journal* (Autumn 2007): 66.

initial operations leading up to larger offensives such as the Battle of Vimy Ridge in April 1917.<sup>194</sup>



Figure 5. The advancement of the 29th Infantry (Vancouver) Battalion over “No Man's Land” during the Battle of Vimy Ridge 1917

*Source:* Library and Archives Canada, [www.collectionscanada.gc.ca/firstworldwar/025005-1300-e.html](http://www.collectionscanada.gc.ca/firstworldwar/025005-1300-e.html), (accessed 17 January 2010).

### Training in Small Unit Tactics and Advanced Weaponry

The Canadian Corps' autonomous status allowed it to control its own training and implement its own tactical innovations.<sup>195</sup> In addition, new tactical innovations employed

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<sup>194</sup>42nd Canadian Infantry Battalion, “War Diary For the Month of April 1917,” NAC, WD, RG9, MD, Series III-D-3, vol. 4938, reel T-10743, file 433, access code 90, p3, <http://data2.collectionscanada.ca/e/e040/e000977532.jpg> (accessed 2 February 2010).

in raiding parties eventually developed into new tactical doctrine, training schools, and radical re-organization from platoon to battalion level.<sup>196</sup> One of the main reasons that raids were so successful was training. The key to training soldiers for trench raids was rehearsals.

Units conducted Rehearsals weeks before a raid so every member from the commanding officers down to the privates knew every detail of the trench raid and each knew his individual task. The 7th Canadian Infantry Battalion provided an example of a rehearsal and preparation for a raid of the German trenches on the Douve River in France on 17 November 1915:

A field was found where the natural configuration lent itself easily to adaptation to resemble the enemy trenches; a ditch served for the DOUVE River; a path for the MESSINES road; another ditch for the enemy wire trench; and a succession of stacks for the PETITE DOUVE fort. Other trenches were turned up to make the plan complete. Over this area the parties worked day and night. Bridges were put down; the attacking groups led forward; the trenches were bombed; and the retirement was carried out as laid down. When the battalion went into the trenches, this system was continued. All continued together, living in IRISH FARM, keeping fit, and going over the minor details of preparation. This included:

1. The fitting up of a room with heating apparatus, so that the men, on returning from the attack, could be warmed and dried.
2. The provision of spare socks and underclothing.
3. The sacking of bombs in bundles of 20.
4. The removal of all marks of identification.
5. The provision of face masks.
6. The testing and strengthening of bridging ladders.
7. Practice with traversor wire mats.

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<sup>195</sup>Schreiber, *Shock Army of the British Empire*, 19.

<sup>196</sup>For more information on the Canadian Corps' doctrinal development, see Shane B. Schreiber, *Shock Army of the British Empire*; and Bill Rawling, *Surviving Trench Warfare*.

8. Fastening specifically purchased electric torches to the bayonets of bayonet men. (These torches enabled the men to flash their lights without removing their hands from the rifle, and blinded those in whose eyes they were flashed).
9. Sacking, marking and stowing all spare kit.
10. Preparing spools of wire entanglements to be used in blocking captured trenches.
11. Providing revolvers and wire cutters for those who needed them.<sup>197</sup>

There were no centralized special schools for trench raiding because Canadian units set up their own training disciplines on weapons and tactics. One training discipline was reconnaissance patrolling. The personnel chosen for the raid, including replacements, first had to participate on reconnaissance patrols. Units emphasized selecting experienced personnel to lead new replacements on patrols. Patrolling made soldiers more oriented to the terrain, acclimatized to the weather, and more confident to conduct raids.<sup>198</sup>

For the Canadian Corps, one of the purposes of trench raiding was to capture German prisoners. This was in order to identify their units and gain information on their disposition, composition, and strength through interrogation. A trench raid operation order dated 16 January 1917 explains that purpose:

The 21st Battalion attacking party will enter the enemy trench from M.15.b.6 to M.15.b.9.8. (reference points) at ZERO HOUR plus 4 minutes for the purpose of inflicting casualties, making prisoners, securing booty and wrecking dugouts in the system of trenches in the area attacked.<sup>199</sup>

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<sup>197</sup>N.V.M. Odum, "Report on Minor Operations, 19 November 1915," 3.

<sup>198</sup>Godefroy, "A Lesson in Success: The Calonne Trench Raid, 17 January 1917," 27-28.

<sup>199</sup>Elmer Jones, "21st Canadian Battalion Operation Order No. 73," 16 January 1917, WD, NAC, RG9, MD, Series III-D-3, vol. 4930, reel T-10731, file 410, p11, <http://data2.collectionscanada.ca/e/039/e000961482.jpg> (accessed 23 January 2010).

In addition, this raiding was to induce the Germans to send their reserves forward so the Canadian artillery can attrite them and lower the German army's morale.<sup>200</sup> The Canadian raids eventually made the Germans uneasy to the point of avoiding of their trench duties and patrolling, which reduced their alertness to further Canadian attacks.<sup>201</sup> Another priority for trench raiding was to capture or destroy German strong points such as pillboxes, dugouts, machine-gun bunkers or other casualty-producing crew-served weapons.<sup>202</sup> This prevented significant Canadian casualties for a future attack on the German lines.

A Canadian Corps intelligence report on German prisoner interrogations, dated 24 May 1917, shows the effectiveness of the hard training and execution for night trench raids:

Owing to our attacks being delivered generally just before, or at dawn, troops (German) are not allowed to sleep during the night, and must always gather their equipment, and keep rifles and hand grenades ready. "Increased preparedness" is usually ordered from 3 a.m. to 5 a.m.<sup>203</sup>

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<sup>200</sup>2nd Canadian Infantry Brigade, "Report to the 1st Canadian Division on Enterprise at La Petite Douve, 17 November 1915," WD, NAC, RG9, Series III-D-3, vol. 4826, reel T-7186, file: 46, p251, <http://data2.collectionscanada.ca/e/041/e001013880.jpg> (accessed 23 January 2010).

<sup>201</sup>McClintock, *Best O'Luck*, 65; Godefroy, "A Lesson in Success: The Colonne Trench Raid, 17 January 1917," 26.

<sup>202</sup>11th Canadian Infantry Brigade, "Report on Minor Operations," 12 June 1917, WD, NAC, RG9, p5, <http://data2.collectionscanada.ca/e/043/e001062399.jpg> (accessed 30 January 2010).

<sup>203</sup>Canadian Corps General Staff, "Summary of Intelligence: Part II Trench Routine," 24 May 1917, WD, NAC, RG9, Series III-D-3, vol. 4813, reel T-7175, file: 5, p255, <http://data2.collectionscanada.ca/e/041/e001001546.jpg> (accessed 15 May 2010).



Figure 6. First Platoon to Enter Valenciennes from the West,  
Dashing toward the Canal, November 1918

*Source:* Library and Archives Canada, [www.collectionscanada.gc.ca/firstworldwar/025005-1300-e.html](http://www.collectionscanada.gc.ca/firstworldwar/025005-1300-e.html), (accessed 17 January 2010).

Training on advanced weaponry was an ad hoc policy of the Canadian Corps, in order to make regular infantrymen more multi-skilled on a variety of weapons introduced in World War I. By April 1916, with General Currie's guidance, training for trench raids had progressed into a tactical method that integrated every weapon accessible to the Canadian Corps.<sup>204</sup> Raids and patrols were opportunities for replacements to train on small-unit tactics such as infiltration, and on specialized weapons such as bombs, rifle grenades, light machine guns, pistols, satchel charges, and bangalore torpedoes.<sup>205</sup> Raids also involved the assistance of artillery, mortars, and machine guns. General Currie was

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<sup>204</sup>Rawling, *Surviving Trench Warfare*, 91.

<sup>205</sup>*Ibid.*, 90 and 102.



influenced by the French army in April 1916, when he observed them in battle using trench weapons and small-unit tactics.<sup>206</sup>

When General Currie observed the French at the Battle Verdun on training troops in trench warfare when he concluded in his report, “the French attach the greatest possible importance to this special training of attacking troops, and in my opinion is the greatest lesson to be learned from our visit to Verdun. I believe that greater success would attend our attacks if those attacks were made by absolutely fresh troops who had been specially trained for the work at hand.”<sup>207</sup>

In conclusion, Canadian military culture embraced nationalism and autonomy to create its own doctrine, and innovate its own solutions, independent of the British imperial military tradition of complete doctrinal authority over its dominion and colonial troops. The Canadian Corps’ persistence in acquiring tactical, organizational, and administrative autonomy from the BEF gave it the freedom to establish its own learning organizations to face its tough tactical situation. With this advantage, the Canadian Corps enhanced their trench raiding methods to a higher performance level than its allies as a functional approach to solve its tactical problem. The Canadian Corps’ resourcefulness, adaptability, and lessons learned on the battlefield paid off in the tactical effectiveness of the Canadian raiding parties. The Canadian Corps was able to expand standard operating

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<sup>206</sup>Ibid., 89.

<sup>207</sup>NAC, “Notes on French Attacks, North-East of Verdun in October and December 1916,” 3-4, quoted in Ibid., 163.

procedures in trench raiding that became a paradigm for the BEF and other Allied armies.<sup>208</sup>

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33. <sup>208</sup>Godefroy, “A Lesson in Success: The Colonne Trench Raid, 17 January 1917,”

## CHAPTER 4

### CONCLUSION

By 1916, the Battles of Verdun and the Somme typified the Western Front's tactical battlefield as an endeavor to end static trench warfare and return to mobile warfare while still using obsolete tactics. This resulted in mounting casualties and reminded the German and Canadian armies' leadership that the tactical battlefield still mandated vigorous learning and innovation. Every army that fought on the Western Front implemented tactical innovations, some more successfully than others, in order to maximize their combat effectiveness and reduce casualties. The tactical battlefield rewarded learning organizations such as the German storm troops and Canadian trench raiders by providing them with the means to experiment with their tactical innovations based on the effectiveness of advanced weaponry. These learning organizations also adapted and modified their decentralizing its leadership to the junior level.

The tactical battlefield also required a new form of decentralized leadership. It required minor operations employing small unit tactics conducted by company down to squad level units. To support this requirement, minor operations demanded competent junior officers and NCOs with initiative and sound judgment to lead small unit actions in preparation for the larger battles and offensives led by their field grade superiors. It also demanded soldiers to comprehend how their individual tasks are linked to their unit mission's overall collective task and purpose within their commander's intent.

Decentralized leadership also ensured quality training because it stressed junior leaders to take the initiative in improvising their own training standard operating procedures more relevant to their tactical situation on the battlefield.

The tactical battlefield reminded one that tireless training is the answer to tough tactical situations. Both the German storm troops and Canadian trench raiders embraced difficult and rigorous training in depth and speed that challenged them physically and mentally which were beyond the mental and physical capacity of average soldiers. Both armies acknowledged that this type of training required them to give their elite assault units a certain degree of autonomy from the rest of the force to ensure that their training concentrates on the necessary skills that would lead to tactical effectiveness.

The innovations developed by the German storm troops and the Canadian trench raiders were limited by their strategic circumstances. The Canadian Corps was just one element in a combined dominion and colonial army integrated into a much larger BEF. However, the Canadian Corps' persistence in acquiring tactical, organizational, and administrative autonomy from the BEF gave it the freedom to establish its own learning organizations to face its tough tactical situation. Unlike the Australian and New Zealand Army Corps (ANZACs), the Canadian Corps did not permanently attach its subordinate units to any British corps. With this advantage, the Canadian Corps had more integrity to plan and conduct raids without interference from the British. As a result, the Canadian Corps enhanced their trench raiding methods to a higher performance level than its allies as a functional approach to solve its tactical problem.

The German army's exploitation of storm troop tactics was forced on them by material and manpower limitations. In addition, German high command's strategy for the army to keep a defensive posture on the Western Front until achieving victory on the Eastern Front led to the development of the elastic defense-in depth doctrine. At the same time, it had to seek a qualitative, functional solution due to their quantity limitations.

They focused on better-trained troops with more competent officers and NCOs to lead them resulting in the employment of the storm battalions. The storm battalions' enhancement of their tactics, (*Stosstrupptaktik*,) used as the new offensive doctrine for counterattack troops, which was one requirement for the defense-in-depth. The German and Canadian armies had to adjust their military cultures in the middle of the war due to their strategic situations on the Western Front.

Military culture is a key factor in influencing military innovation. Prusso-German military culture embraced technical and tactical innovation since the time of Fredrick the Great in the eighteenth century. This culture was fundamental to the German army's adaptation to its manpower and material shortage by 1916. Canadian military culture embraced nationalism and autonomy to create its own doctrine and solutions, independent of the British imperial military tradition of complete doctrinal authority over its dominion and colonial troops. The German storm troops and Canadian trench raiders are innovations that were external manifestations of their military cultures.

The subject of military culture's influence on its armies in World War I, suggests field for further research. Specifically, additional research might be done on how to evaluate the way American military culture influenced the US Army's experience in World War I. The main challenge for this research is that the United States participated only in the last eighteen months of the war. The American Expeditionary Force (AEF) did not deploy to France until 1917, and spent the remainder of that year training on trench warfare given by British and French army instructors, before committing to battle. The AEF was and did not engage the German army on the Western Front until 1918, just

in time to relieve pressure on the British and French armies caused by the German army's Spring Offensive.

The 2nd Division was a combined force of US Army and US Marine brigades and was one of the first divisions to deploy to France and receive the full training on trench warfare before engaging the German army. The 2nd Division had the most exceptional combat record out of all American divisions as measured by objectives gained and casualties inflicted on the Germans. It earned an esteemed reputation throughout the AEF and Allied armies, but never referred to as "elite."

The primary research question asked how military culture formed the key factors essential to the tactical effectiveness of the specialized assault units on the Western Front. The military cultures of these armies structured the logical and innovative principles that were fundamental in the tactical effectiveness of these elite assault units by making attainable revolutionary developments in force structure, institutional support, personnel selection, decentralized leadership, and training on small-unit tactics and advanced weaponry seen in the German storm troops and Canadian trench raiders.

The secondary research question asked: did these factors create similar or different effects for each army? The factors created a larger, more unique effect on the German army. These factors that led to the development of storm troop tactics, had a profound effect on the German army later during the interwar period. The German general staff used combined arms warfare concepts from the second half of World War I to innovate blitzkrieg tactics during World War II. Another example is that these factors set the frame for creating entire storm troop divisions in preparation for the Spring

Offensive of 1918. As the effects for the German army lasted well into World War II, this was not the case for the Canadian army.

The Canadian Corps, disbanded after World War I, did not influence any developments during the interwar period. However, because of its trench raiding successes, these military cultural factors had an immense, but brief effect on the Canadian Corps. Trench raiding was an invaluable intelligence tool for the Canadian Corps from late 1915-1918. For example, the trench raids conducted from 20 March to 9 April 1917, gained vital intelligence on the German positions leading up to the Battle of Vimy Ridge on 9-14 April 1917.<sup>209</sup> This recent intelligence gave the Canadian Corps the flexibility to alter its attack plans and seize more of the initiative from the four German (Bavarian) divisions entrenched on Vimy Ridge by 14 April, and drove them off with surprisingly fewer casualties than previous attempts.<sup>210</sup> The Canadian victory at the Battle of Vimy Ridge in 1917 represents one of the most indicate victories of any BEF unit in France and Belgium since the beginning of the war.<sup>211</sup>

The lesson learned from the experiences of the German storm troops and the Canadian trench raiders, is how an army has to change its military culture in the middle of a war, especially when World War I was itself a military revolution in combined arms warfare and the advanced weapons systems introduced were revolutions in military affairs. Even though innovation was already a part of German military culture, the

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<sup>209</sup>Nicholson, *The Official History of the Canadian Army in the First World War*, 234.

<sup>210</sup>*Ibid.*, 234 and 246-247.

<sup>211</sup>*Ibid.*, 266.

German army had to let go of its authoritative Prussian tradition to adapt to this military revolution. In return, the German army enhanced its “mission tactics” (*Auftragstaktik*) that stressed initiative in its tactical level leaders and created the storm troops to spearhead its offensives. The Canadian Corps as well had to change its military culture by gaining its tactical autonomy from the BEF and develop its own tactical doctrine to adapt to this military revolution. In return, it used its trench raiders to conduct a series of brief raids on the German lines to gather intelligence and destroy strong points, which prepared the battlefield to the advantage of subsequent larger Canadian offensives.

These lessons taken by the German and Canadian armies in World War I, reminds modern military officers today that military culture can either suppress or enhance innovations that are required to meet new conditions that present themselves in a war. For example, the Vietnam War represents the U.S. military’s cultural change of transforming its traditional, conventional offensive doctrine to a counterinsurgency police action in an attempt to defeat the Viet Cong. Another example is the U.S. military facing the same dilemma in its counterinsurgency war in Afghanistan. Both examples illustrate the U.S. military letting go of its traditional, conventional, aggressive way of war and embracing an institution of training host nation armies, and directly working with non-military, inter-agency personnel to win a war.



## APPENDIX A

Seventh Canadian Infantry Bn: Operation Orders No 59.

By Lt Col K.W. Odlum, Commanding

15-11-15

Ref: Wolverghem – Messines  
Trench Map, Sheet 28 SN 4  
1 – 10,000

1. INTENTION. On night of 16<sup>th</sup> 17<sup>th</sup> November, the 2<sup>nd</sup> Cdn. Inf. Bde. will attack 2 points in the enemy's lines opposite its front for the purpose of discovering the enemy's strength & gaining information concerning his defence. The 7<sup>th</sup> Btn will assault & penetrate the enemy trench at U.S.A.9.2 ½. Simultaneously the 5<sup>th</sup> Btn will assault the enemy trench at U.S.A.7.10.

2. PREPARATION. On the 15<sup>th</sup>-16<sup>th</sup> November, "A" Battery R.C.H.A. will cut wire in front of "Artillery" the 7<sup>th</sup> Btn attack, & at the same time the 118<sup>th</sup> Howitzer Battery will bombard the enemy front line & communicating trenches between U.S.A.9.2 ½. & the PETIT-DOUVE and breach the parapet.

"Trench Mortars" On 15-11-15 at 5 pm, the 14<sup>th</sup> Trench Mortar Battery will register on PETIT-DOUVE. On 16-11-15 it will bombard the PETIT-DOUVE between 4 & 6 pm & will endeavour to destroy the machine gun emplacement at U.S.a.4. Between "STAND DOWN" & midnight it will continue to attack the same target with occasional fire.

"Machine Guns" The M.G.O. (Machine Gun Officer) will detail a gun in Trench 134 to co-operate with the 14<sup>th</sup> Trench Mortar Battery & cover its fire. After dark he will assist in covering the preparations of the attacking party by firing on selected targets to the rear and to the left of PETIT-DOUVE taking care not to fire near the point of assault.

"Rifle Batteries Snipers" During the afternoon of 16-11-15 O.C. (Officer Commanding) of Trenches 132 & 134 will increase the activity of their snipers and fixed rifle batteries & will endeavour to prevent the enemy from using the communicating trenches in near the point of assault. Between "STAND DOWN" & the hour of the assault, O.C. Trench 134 will keep up slow rifle fire in the direction of the enemy trenches on the MESSINES-HILL to cover the noise made by the patrols preparing for the advance along the DOUVE. He will also cause his rifle grenade rifles to fire grenades into the enemy's trenches at PETIT-DOUVE while the assaulting party is in the enemy's trenches.

3. ATTACKING The attacking party will be under the command of Captain L.J. Thomas &

PARTY the following-(a) 1 N.C.O. & 6 scouts under Lt W.I. Holmes to be detailed by the Btn Reconnaissance Officer (R.O.) (b) 12 bombers to be detailed by Btn Grenade Officer to be divided equally into a right bombing party under Lt McIllnee, a left bombing party under Capt Cosligan.(c) 1 N.C.O. & 6 wire men, to be detailed by the

Wiring Officer and 6 shovel men, to be detailed by O.C. #2 Coy. 4 shovel men & 4 wire men to accompany the left bombing party & 2 shovel men & 2 wire men to accompany the right bombing party. (d) 1 N.C.O. & 10 riflemen to be detailed by the O.C. #2 Coy and be divided: 3 riflemen at the right bridge Covering party 3 left 4 Trench rifle party. (e) 1 N.C.O. & 3 men with wire cutters as BOUVE wire cutting party to be detailed by O.C. #2 Coy (f) 1 N.C.O. & 10 riflemen to be detailed by O.C. #2 Coy, as LISTENING POST support (g) 7 stretcher bearers to be detailed by O.C. #2 Coy, 2 to accompany trench rifle party & 2 to proceed to LISTENING POST (h) 3 N.C.O.s & 20 men to be detailed by O.C. #2 Coy as reserve. The assaulting parties will be under the command of Lieut R.H. Wrightson. All officers, N.C.O.s & men detailed as above will report to the O.C. Attack at IRISH FARM at 5 pm on the night of the 16<sup>th</sup> -inst.

4. EQUIPMENT. No packs, haversacks or water bottles will be carried. Great coats & gum "A" boots are not to be worn. Each mans' kit will be packed in a sandbag, marked & left at IRISH-FARM, under a guard to be detailed by O.C. #2 Coy. "B" All officers and other ranks proceeding beyond our front trenches will wear black veiling masks-

(1) To reduce the possibility of the attack being discovered prematurely.

(2) As a means of identification.

"C" The O.C. of the attack will be responsible that the following articles of identification are removed by all ranks prior to the assault-

(1.) Identity discs.

(2.) Pay books.

(3.) All cap & coat badges including shoulder patches.

(4.) Marks on clothing indicating the unit.

(5.) Letters & books with names.

(6.) Any other articles which might disclose information to the enemy.

"D" Shovel men will not carry rifles. In addition to their shovels they will carry an apron with reserve supply of bombs for the bombing parties to which they are attached.

"E" Each wire man will carry a spool of wire & a supply of bombs.

5. RECONNAISSANCE. During the afternoon of the 16<sup>th</sup>-inst, the R.O. will send out a patrol of 2 men along the bank of the DOUVE to endeavour to make a daylight report on the success secured by the artillery in cutting the enemy wire and breaching his parapet. After dark, scout patrols under the R.O. will again will again go out & report upon-

(a) The width of the DOUVE at the point to be crossed.

(b) The damage done to the enemy's wire, & the most practicable route through it.

(c) The most suitable spot for the assault.

(d) Any obstacles between the left bank of the DOUVE and the point of the assault.

(e) Any enemy parties found working on wire or parapet.

When these reports are turned in to the O.C. of attack party, patrols will carry 2 bridging ladders (which the O.C. of attack party will have in readiness in front of Trench 133) to the point for crossing the DOUVE, & will place them in position. They will place a third bridge across the DOUVE at the advanced LISTENING POST. They will also cut a clear path through our own wire from Trench 133.

6. EXIT & ROUTE. The attacking party will leave from the breach in the middle of trench 133. It will proceed along the right bank of the DOUVE RIVER & will cross the river about 30 yards before reaching the enemy's lines. The assault will be delivered from the left bank of the DOUVE at a point about U.S.a.9 ½.3. Every care will be used to reach the assaulting point without discovery across the DOUVE at the advanced LISTENING POST.

They will also cut a clear path through our own wire from Trench 133.

7. ADVANCE. At 11:30 pm the scouts will lead the assaulting force forward in the following order.

- (a) Right & left bridge covering parties.
- (b) Right & left bombing parties with their wiring and shovel men.
- (c) Trench rifle party with the O.C. assaulting party & 2 stretcher bearers.
- (d) DOUVE wire cutting party carrying 2-12 feet scaling ladders.

After these parties have gone forward, the support squad will proceed the position at the LISTENING POST.

8. ASSAULT. At 12 midnight the assault will be delivered from the bridging point. It will be led though the enemy wire by the scouts who will carry Traversor mats to throw over uncut wire. It will proceed silently as long as possible. If enemy working parties are out it will bomb them & endeavour to follow them into their trench. If there is no working party, it will, when discovered, throw bombs into & rush the trench.

The Left bombing party will bomb and block with wire the front trench to a point beyond the first communicating trench on the right & will also bomb the communicating trench as far as the support trench when it will join a squad from the right bombing party.

The Right bombing party will bomb along the front line to a point EAST of MESSINES ROAD where it connects with the Support Line. It will send a squad along the Support Line to join a squad from the left bombing party referred to above & together they will block the Support Trench beyond its junction with the communicating trench.

The remainder of the right bombing party will attack the machine gun emplacement about U.S.2.½.2 & will block the front trench beyond the machine gun position.

The Trench rifle party will enter the trench & take firing positions towards the enemy's rear to stop any sudden counter-attack. They will carry with them on entering aprons with 20 bombs each which will be left with the O.C. assaulting party at the breach. The scouts will maintain communication in the captured trench, will take charge of prisoners, will collect arms & every possible means of identification of enemy units & will carefully examine the enemy's defensive construction & weapons.

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USACGSC  
100 Stimson Avenue  
Fort Leavenworth, KS 66027-2301

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DJIMO  
USACGSC  
100 Stimson Avenue  
Fort Leavenworth, KS 66027-2301

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CTAC  
USACGSC  
100 Stimson Avenue  
Fort Leavenworth, KS 66027-2301  
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